

UNISA

**AN ANALYSIS OF THE SELECTION CRITERIA AND PROCESSES INTO
BASIC NURSING DIPLOMA PROGRAMME IN THE GAUTENG
PROVINCE, SOUTH AFRICA**

By

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DECLARATION

I declare that the study entitled '**AN ANALYSIS OF THE SELECTION CRITERIA AND PROCESSES INTO BASIC NURSING DIPLOMA PROGRAMME IN THE GAUTENG PROVINCE, SOUTH AFRICA**' 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:

A handwritten signature in black ink, appearing to be 'D. D. D.', written over a light blue rectangular background.

DATE: February 2016

DEDICATION

This dissertation is dedicated to my family, friends and colleagues. To my late parents Percy and Winnie, I just wish you both were here.

A special dedication to my pioneer academic and inspirational husband Thifhelimbilu Emmanuel Luvhengo for your continued motivation and support throughout my studies. Your patience and encouragement are beyond measure. I thank the Almighty for you. I would not have achieved this degree without your encouragement.

To my lovely son Unarine Luvhengo who continuously cheered me up and gave me promising words that I kept me going, you are a star.

I also dedicate the dissertation to my only sister Palesa, hope I did you proud. To my nephew Thabang and nieces Cebo and Sega hope this will be an inspiration to you all.

Lastly, a special appreciation to my colleagues and friends for unceasingly inspiring and believing in me when I doubted myself, your reassuring words pushed me to keep on going.

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AN ANALYSIS OF THE SELECTION CRITERIA AND PROCESSES INTO BASIC NURSING DIPLOMA PROGRAMME IN THE GAUTENG PROVINCE, SOUTH AFRICA

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ABSTRACT

Background: This study derived from the concerns raised by nurse educators, clinical preceptors, and some nursing students in public nursing colleges in Gauteng following the implementation of the provincial selection criteria and processes. While these criteria could be seen as a means of standardising the admission into the Basic Nursing Diploma Programme at public nursing colleges, anecdotal reports from nurses in education institutions and clinical practices indicated a lack of professionalism, high attrition rates among these cohorts of students. The researcher believed that any meaningful selection criteria and processes should be on the views expressed by people who have been through the process as students or educators.

Aim: The aim of this study was to analyse the selection criteria and processes followed by nursing colleges in the Gauteng Province to admit students into Basic Nursing Diploma Programme with the view of proposing selection criteria and processes that would secure the admission of the best candidates to this programme in public nursing colleges in Gauteng Province.

Design: Quantitative descriptive survey design with self-completion questionnaire was used to generate data for this study. Out of 571

questionnaires distributed, 492 were returned and considered for analysis. Summary descriptive statistics were performed using SPSS version 21.

Results: Four of the 13 items analysed were viewed by more than 70% of the respondents as less important and irrelevant to the selection of best candidates for nursing professional education. Proposal for changes supported by the rational for these changes were made by the respondents.

Conclusion and Recommendation: The study proposed a framework that could guide the provincial authority in developing admission criteria that will ensure the selection of best candidates for Basic Diploma Nursing Programme in the province.

KEY WORDS: Basic nursing diploma, Contemporary attributes of a professional nurse, Selection criteria, Selection process

LIST OF ABBREVIATIONS

CCTDI	California Critical Thinking Disposition Inventory
CCTST	California Critical Thinking Skills Test
CT	Critical Thinking
DOL	Department of Labour
EI	Emotional Intelligence
GDOH	Gauteng Department of Health
GPJC	Gauteng Provincial Job Centre
MMI	Multiple Mini Interviews
MSCEIT	Mayers Salovey Caruso Emotional Intelligence Test
NEI	Nursing Education Institution
OSLER	Objective Structured Long Examination Record
SANC	South African Nursing Council
SBA	Simulated Based Assessment
SJT	Situation Judgement Test
UKCAT	United Kingdom Clinical Aptitude Test
WGCTA	Watson- Glaser Critical Thinking Appraisal
(APS)	Academic Performance Score

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CHAPTER ONE

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

The first chapter provides an orientation to the study in terms of the background of the research problem, the statement of the research problem, the aim and objectives of the study, the significance of the study, the theoretical framework of the study, the definition of key concepts, an overview of the research method, and an overview of the structure of the dissertation.

1.2 BACKGROUND OF THE RESEACH PROBLEM

Nursing education plays a key role in producing the majority of healthcare workforce needed in providing healthcare services at all levels of the health delivery systems (Tayebi, Dehghan-Nayeri, Negarandeh & Shahbazi, 2013:59). In the past decades many countries around the world including South Africa are experiencing shortage of professional nurses, which is attributed to many factors including the production in terms of number and quality. According to the Global Health Workforce Alliance (2012), the number of nurses produced currently by Nursing Education Institutions (NEI) around the world is not sufficient to meet the demand for professional nurses required by the national health delivery systems.

Reports by Gantz, Sherman, Jasper, Choo, Herrin- Griffith and Harris (2012: 434); (GHWA, 2013) estimate that by 2020, Europe will experience a shortage of 600,000 nurses. In South Africa, the shortage of professional nurses in 2012 was estimated at more than 18,000. It was further predicted that this shortage

would remain so until at least after 2015 (Human Resource Strategy for Health, 2012/13: 134). The scarcity of nurses means inadequate nurse to patient ratio and consequently ineffective functioning of a health care system and poor nursing care (Baker, 2012:822). For examples, Tanzania has 0:35 nurses and midwives per 1000 people whereas in India the ratio is 1:500 patients (WHO, 2010). These ratios are far from the internationally accepted nurse patient ratio which is set at 1:4 depending on the type of nursing unit or acuity level of patients (ICN, 2009:1).

The shortage of nurses is attributed to several factors including the aging workforce, emigration, attrition and increasing number of the population relative to the number of nurses being produced and diminishing interest in the profession. It is predicted that around 44% of nurses will voluntarily leave the nursing profession in the United Kingdom, Poland and Ireland and 40% will leave through retirement (Gantz, Sherman, Jasper, Choo, Herrin- Griffith & Harris, 2012). Evidence suggests that a large number of candidates choose the nursing profession as a last resort or if they obtain poor grades in high school exit examination. This lack of primary interest to nursing does predispose the majority of this group of candidates to poor academic performance and high attrition (Neilson & Jones, 2012:590-1). It is therefore important to pay serious attention to the selection and admission procedures into nursing education programmes.

Up scaling of nursing workforce is one of the global strategies to respond to the shortage of nurses and increase coverage of healthcare services (Global Health

Workforce Alliance, 2013). This strategy requires nursing education institutions to implement innovative strategies to recruit, train and produce the number and the quality of nurses to address the nursing workforce shortage. Nursing training institutions must ensure that students who are admitted into nursing programmes succeed in their academic and practical learning (Callwood, Allan & Courtenay, 2012: 835); and remain in the nursing profession. Therefore, it is essential that prospective students will become quality competent nurse practitioners who would remain in the profession. Irrespective of pressure to recruit and train more nurses it is essential to identify the 'ideal type' of prospective students to be trained as nurses (Rodgers, Stenhouse, Creddie & Small 2013:2).

In addition to the admission criteria, the selection and admission processes are important in ensuring that the right candidates are admitted into the programme. In most countries, the selection of prospective candidates is based on high school result, recognition of prior learning (RPL) and performance in psychometric test followed by interviews (Callwood et al., 2012:835). In response to low interest in the nursing profession by school leavers and the high unemployment among youths in South Africa, prospective student nurses enrolling at public nursing training institutions were previously recruited from a pool of applicants from successful high school students and a pool of job seekers from the Department of Labour, this is according to the DoL spokesperson Magakwe (2011) and (GDoH, 2012). At present the recruitment of prospective candidates is done through Gauteng Professional Job Centre data base for external candidates from the registered 'job seekers". Recruitment

of internal candidates in the (GDoH) are done by the nursing colleges. This type of partnership is also used in the United Kingdom and known in the literature as the “rolling admission” policy (Callwood et al., 2012:836).

These different selection and admission processes into nursing programmes have their limitations. A study conducted by Creech and Aplin-Kalisz (2010: 404) revealed that it is difficult to select the most suitable candidate into a programme using the “rolling admission” policy. They argued that this policy was only suitable when the selection was done from smaller numbers of applicants. On the other hand, Callwood et al (2012: 835-6) argued that personal interviews do not produce reliable and valid assessment of the candidate vis-à-vis their suitability for the profession due to their lack of objectivity and low predictive success value. They emphasised that academic performance together with ideal attributes of a good nurse are necessary for the admission into nursing programme. Other authors (Rodgers et al 2013:2) argued that the psychometric tests and interviews organised by the nursing colleges as part of the selection and admission processes do not guarantee the successful progress of the selected candidates in the programme and their future career in the nursing profession.

It is acknowledged that the Nursing Education Institutions (NEI) are still struggling to come up with a consistent and successful selection and admission procedures into professional nursing education. They are required to select and train candidates who possess good attributes necessary for nursing developments and changes that would occur in the future of the nursing

profession (Creech & Aplin-Kalisz 2010: 405; Callwood et al 2012: 836). Authors Rodgers, Stenhouse, McCreddie and Small (2013:2) emphasised the need for the involvement of nurse educators and practicing professional nurses in the selection of nursing students as they have acquired the necessary skills needed to identify attributes of ideal nursing candidates.

While it is important to increase the numbers of professional nurses in the country, it is important to ensure that candidates who are selected to train as nurses are of high calibre to safeguard the wellbeing of patients during health care delivery and maximise worker productivity (GHWA 2013). The researcher experience as a nurse educator and professional nurse and the preliminary literature reviewed suggest that the current selection and admission procedures into Basic Nursing Diploma Programme do not necessarily ensure the enrolment of students who have the attributes required to become good nurses; and little is known on how these procedures are followed by the nursing colleges and the problems encountered by the nursing colleges in trying to balance the (GDoH) expectations and the professional attributes. It is from this perspective that the researcher intended to analyse the selection and admission processes into Basic Nursing Diploma Programme in the Gauteng Province.

1.3 STATEMENT OF THE RESEARCH PROBLEM

Due to severe shortage of qualified nurses and high unemployment rates among youths in South Africa, the public nursing colleges in Gauteng were asked by the Gauteng Department of Health to select candidates for Basic Nursing Diploma Programme from the pools of job seekers at the Gauteng Professional Job Centre and candidates with nursing background working at different health facilities in the province. Public nursing colleges were compelled to use the admission criteria designed by the Gauteng Department of Health.

While these criteria could be seen as a means of standardising the admission into the Basic Nursing Diploma Programme at public nursing colleges, anecdotal reports from nurses in education institutions and clinical practices indicated a lack of professionalism and high attrition rates among these cohorts of students. They attributed these problems to among others the recruitment of candidates who may not have nursing as their first career of choice and the inabilities of the current selection tool to identify candidates that have the essential qualities required by the nursing profession. The researcher believed that any meaningful selection criteria and processes should be on the views expressed by people who have been through the process as students or educators.

Therefore, this study attempted to analyse the selection criteria and processes followed by nursing colleges in the Gauteng Province to admit students into Basic Nursing Diploma Programme with the view of proposing selection criteria and processes that would secure the admission of best candidates to this programme in public nursing colleges in Gauteng Province.

1.4 AIM AND OBJECTIVES OF THE STUDY

The aim of this study was to analyse the selection criteria and processes followed by nursing colleges in the Gauteng Province to admit students into Basic Nursing Diploma Programme. This was done with the view of proposing selection criteria and processes that would secure the admission of the best candidates to the Basic Nursing Diploma Programme in public nursing colleges in Gauteng Province.

The objectives of this study were twofold:

1. To describe the views of nursing students and nurse educators regarding the current selection criteria and processes in terms of the:
 - 1.1. Importance and relevance in securing the admission of best candidates to the Basic Nursing Diploma Programme in the Gauteng Province; and
 - 1.2. Changes needed in securing the admission of best candidates to the Basic Nursing Diploma Programme in the Gauteng Province.
2. To describe the views of nursing students and nurse educators regarding the introduction of contemporary assessment methods in the selection processes of students to Basic Nursing Diploma Programme in public nursing colleges in Gauteng.

1.5 SIGNIFICANCE OF THE STUDY

The study has major policy implications. By analysing the current selection criteria and processes into Basic Nursing Diploma Programme, the study will provide insight into the strengths and weaknesses. Such information can be used by the Principals of the nursing college to improve their selection criteria and processes. The results will serve as an objective feedback to the Provincial Health Department authority on the current status of the selection and admission processes at the nursing colleges in the province. Researchers can use the results as baseline data for further studies.

By exploring and describing the selection criteria and processes that reflect the stakeholders' views of the key attributes of a contemporary professional nurse within the Gauteng Province. The study will provide policy-makers with a tool that can be used to admit candidates with high chances of completing their nursing training and remaining in the profession. The increase completion and retention rates will lead to less financial wastage from the provincial government and more importantly the increase number of professional nurses which is one of the objectives of the National Strategic Plan for Nursing Education and Training and Practice 2012/13 – 2016/17.

1.6 DEFINITIONS OF TERMS

Basic nursing diploma: Diploma in Nursing (General, Psychiatry and Community) and Midwifery (R425)

Contemporary attributes of a professional nurse: qualities, virtues, characteristics required that will enable a nurse to perform their functions and maintain high standards in all areas of practice and governance. These attributes include intellectual, practical, dispositional and moral qualities (Begley 2010:526)

External candidate: candidates who were not working for the Gauteng Department of Health

Internal candidate: candidates who on commencement of training have been working for the Gauteng Department of Health

Selection criteria: set standardized requirements that a prospective candidate should acquire to enter into the nursing profession

Selection process: procedure that a prospective candidate is put through to ensure suitability for training as a nurse

Stakeholders: people who have a stake in the nursing profession (Polit & Beck 2012:637), nursing faculty including incumbents, nurse educators and community members involved in the assessment, evaluation and development of nursing professionals.

1.7 OPERATIONAL DEFINITIONS OF KEY TERMS

Best candidate for Basic Nursing Programme: The best candidate for Basic Nursing Diploma Programme in this study referred to the candidate selected through the criteria and processes viewed as important and relevant by nursing students and educators.

Selection criteria: In this study, the selection criteria referred to the standardized requirements set by the Gauteng government for admission to Basic Nursing Diploma Programme to public nursing colleges.

Selection process: In this study, the selection process referred to the procedure outlined by the Gauteng government for admission to Basic Nursing Diploma Programme to public nursing colleges.

1.8 CONCEPTUAL FRAMEWORK

In order to analyse the current selection criteria and processes, the researcher used the guidelines for admission to Basic Nursing Diploma Programme in public nursing college in the Gauteng Province. These guidelines include the application process, the minimum requirements, and the selection processes.

The guidelines distinguish between applicants who are working in the public health facilities (internal candidates) and those who are outside of the public health facilities (external candidates). Figure 1 provides an illustration of these guidelines. The interviews are conducted by a panel of multi-disciplinary team and focused on the candidate's (1) daily life experiences, (2) caring experiences, (3) interpersonal relations, (4) conflict management, (5) job matching regarding nursing, and (6) transitioning to student life.

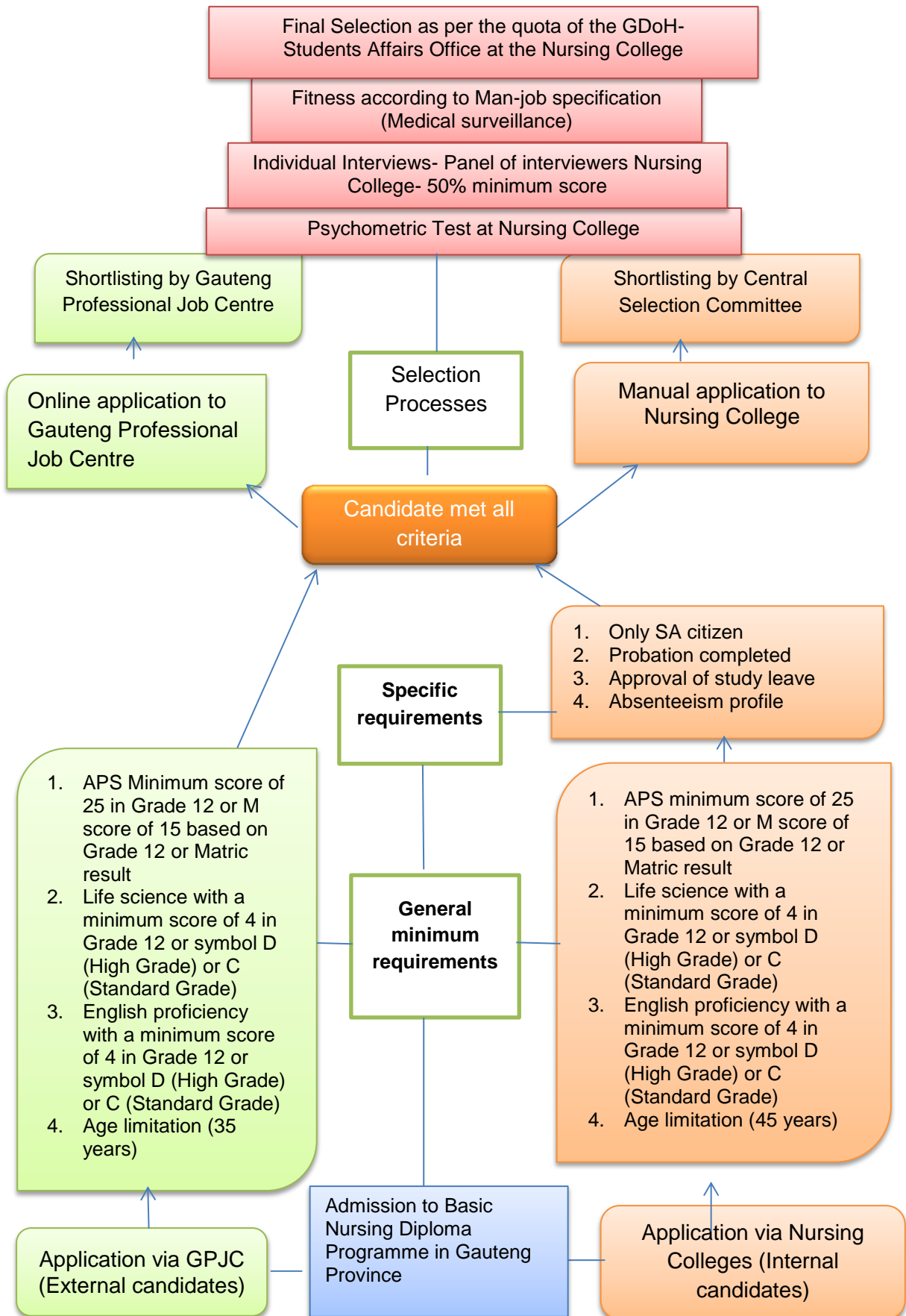


Figure 1: Study Framework 1

1.9 OVERVIEW OF THE RESEARCH METHOD

The study was carried out within the quantitative research approach, using an exploratory descriptive design. Stratified sampling technique was used to select the participants. Structured self-completion questionnaires were used to collect data. The researcher observed all the ethical principles outlined in the University of South Africa Research Policy as well as the universal ethics principles. Ethical approval was obtained from the Ethics Committees of the University of South Africa. Permission was obtained from Gauteng Department of Health and individual nursing colleges. Individual consent was obtained from each participant. More details on ethical considerations are included in Chapter Three.

1.10 STRUCTURE OF THE DISSERTATION

The dissertation was structured into five chapters with a list of references and relevant supporting documents following the fifth chapter. The first chapter provides an overview of the study and articulates the context of the research problem and theoretical framework that underpinned the study. The second chapter covers the literature relevant to the topic of the study. The third chapter described the research methodology. The fourth chapter focuses on the presentation and discussion of the research findings. The fifth chapter provides a summary of the results, the recommendations based on the research findings, and the limitations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The nursing profession is a critical component in health care as the majority of health care workers are nurses. The role of a nurse is essential as the nurse is in the front line of patient care. Nursing is emotionally demanding as it involves all levels from promotion, prevention, treatment and end of life support. Planning of health care delivery revolves predominately around continuous supply of adequate number of nurses. Patient care environment with depleted number of nurses result in higher rate of serious adverse events (Catlett & Lovan 2011:55). Even though it is important to increase the numbers, it is essential to ensure that nurses who are involved in health care have got qualities of a good nurse so as to render efficient, appropriate and up to standard care.

This chapter looks at the literature related to the current trends in the selection criteria and processes into professional nursing education, challenges in addressing the admission criteria, and the theoretical foundation of the current trends in the selection criteria and processes.

2.2 CURRENT TRENDS IN THE SELECTION CRITERIA AND PROCESSES TO PROFESSIONAL NURSING EDUCATION

2.2.1 The Context

One of the challenges that nurse educators are faced with in last decades is to ensure candidates who meet the admission requirements and selected to train as nurses have the necessary attributes to become practitioners who will render safe and quality patient care. According to Smith (2012:172) the profession is struggling to develop, maintain and evaluate strategies on how to ensure nurse competencies during training as they are in the forefront of patient care. There is a marked change with regards to student profile in comparison to the past, which require innovative ways of selecting prospective nursing students (Billings & Halstead 2012:15). Students who are accepted in nursing are, of different demographics, with different expectations, life experiences and background. It is of significant value that nurse leaders should be proactive in developing a curriculum that will be able to prepare the students to care for the diverse needs of the ever changing health system (Billings & Halstead 2012:15).

The selection criteria and processes should ensure that recruited and selected prospective students will be able to progress academically, and render competent patient care (Billings & Halstead 2012:15). The situation is also aggravated by the urgent need of up scaling and increasing the number of professional nurses and midwives. This situation is also evident in South Africa Gauteng Province whereby high numbers of students are accepted to train as nurses. There is a concern whether the policy to increase numbers of student nurses intake will not infringe on the quality of students selected for training.

2.2.2 Traditional Practices

In the past decades, Nursing Education Institutions (NEI) relied heavily on academic performance in deciding the admission into training programmes. In the United States of America Cumulative Grade Point Averages (CGPA) is used to select potential students (Jones-Schenk & Harper 2013:2). Similarly in South Africa the Gauteng Province uses a scoring systems based on marks achieved in National Senior Certificate (M-score) or Grade 12 Academic Performance Score (APS). The scores results are used for short listing prospective nurse candidates and to predict academic performance. Some NEI's use academic performance in high school exist examination either in isolation or in combination with the following: aptitude test, psychometric test, performance in interviews, prior related work experience and recognition of prior learning for selection.

2.2.3 Current Debate and Evidence

A study conducted by Underwood, Williams, Lee and Brunnert (2013:S40) found that Admission Assessment Score based on academic performance is the most objective and reliable method to predict academic progression for nursing students. However selection methods based on academic achievement alone only assess cognitive attributes but are not able to evaluate whether a candidate is intrinsically or extrinsically motivated to become a nurse (Gambino 2010: 2538).

Furthermore, these selection methods are unable to definitely identify attributes of a candidate who would end up becoming a good nurse. In addition to

academic performance (IQ) social, emotional ability and related competencies are necessary for one to function as a good nurse (Benson, Ploeg & Brown 2010: 49). Other skills which are required but not assessable by using academic tests result are communication skill, ability to deal with ethical issues, cultural sensitivity, resilience, personal integrity and becoming a team player (McKimm, Vogan, Phillips & Rees 2012:5).

Authors Hojat (2014: 9); Jones-Schenk and Harper (2014:414); Ranasinghe, Ellawela and Gunatilake (2012: 69) cautioned over reliance on academic performance as a sole criteria for selection of students into professional nursing programmes. They viewed emotional intelligence as a significant determinant of a competent nurse and recommended that nursing education institutions should rather focus on emotional intelligence assessment than on high academic performance. Others (McKimm et al 2012: 8) argued that aptitude test, psychometric test, skills test and situational judgement test, performance in interview, prior related work experience and recognition of prior learning, referee's report, and personal statement should be used to strengthen selection of suitable candidates into professional nursing programmes.

Psychometric test is a written test that is administered prior admission and its sole purpose is to test if a candidate can be enrolled into a particular course. Decision to accept or deny a candidate is based on a predetermined score. It is assumed that a candidate whose score is above the set limit, is likely to succeed and will be shortlisted for further testing in lieu for selection. Available and validated psychometric tests include medical college admission tests (USA) and whereas in the United Kingdom, the United Kingdom Clinical Aptitude Test

(UKCAT) (Khan, Mukhtar & Bano, 2013: 43) is used for selection of medical students. Although psychometric testing goes beyond assessment of cognitive domain and avoids interviewer bias, its main disadvantage is low reliability regarding prediction of future academic performance (Khan et al 2013: 46). In South Africa prospective nursing candidates are subjected to an aptitude/psychometric before they are short listed.

Another frequently used selection tool is interview, which may be done before or follow aptitude/psychometric testing. The interviewing process may comprise of individual or group interview for candidates with one or more interviewers and can be single or multiple mini interviews (MMI), it can be a once off process or extended (Tavares & Mausz 2013: 1). Advantage of interview is that it allows face to face contact.

In South Africa nursing candidates who are successful in psychometric/aptitude testing are invited for a single session face to face group interview instead of multiple mini interviews. Benefit of interview, especially when multiple mini interviews are used, is to allow opportunity to assess non-academic (non-clinical) attributes which are significant in health care professions (Tavares & Mausz 2013: 5). Similarly, Conlon, Hecker and Sabatini (2013: 112) in a study of prospective veterinary science students also emphasized the usefulness MMI in evaluating personal attributes. Its major drawback is inability to predict emotional readiness and future success. Additionally interviews can be tiring, time consuming and expensive especially when a large group of candidates are involved.

It is difficult to eliminate bias during the interviewing process (McKimm et al 2012: 7). In many instances the interviewers base their decision on first impression which is made soon after meeting the interviewee (Sutherland 2012: 35) the above may be inaccurate in some cases. Often in interviews the interviewers are not familiar in what is expected of them, and may not know what to assess for. They may place emphasise on finding negatives in candidates. Sometimes rating of candidates by interviewers is influenced by the order in which they are interviewed. For example, an average candidate who is interviewed immediately after a below average candidate, may be rated higher than average (Lunenburg 2010: 6).

In Gauteng Province, prospective candidates who met the requirements in aptitude/psychometric test are shortlisted and invited to one day single contact interview. Final decision regarding suitability of a candidate is determined on performance during that interviewing session, which may be misleading as there is no direct correlation between performance during interview and on the job performance.

The reliance on interviews to make final decision has multiple shortcomings especially by the interviewers such as personal biases, unfamiliarity of the job), premature decisions, order in which candidates are interviewed, and hiring quotas (Lunenburg 2010: 6). To address some of the disadvantages of traditional interviews Lunenburg (2010: 6) suggested prior training of interviewers, using structure interview involving multiple interviewers and keeping records. Furthermore Lunenburg (2010: 6) strongly discourages the

use of interview as the only tool to base final decision regarding selection of candidates.

Although interviews allow face to face contact and possibility to gain deeper insight into knowing candidates abilities and potential, Sutherland (2012: 34) purports the process may not be able to evaluate if a candidate has the required competencies to succeed in a particular profession.

Sutherland (2012: 37) recommended extension of the traditional interview process to include practical skills assessment such as the so called Objective Structure Long examination Record (OSLER) (Sutherland 2012: 35). Tavares & Mausz (2013: 4) also found that using MMI incorporating simulated-based assessment (SBA) as a tool to assess clinical skills is a valid and reliable method for selection for prospective candidates in health related professions. Lunenburg (2010: 6) also emphasized that interviewers must be appropriately trained and skilled, should have diverse background and have the necessary knowledge expertise of the field needed to perform during interviewing candidates. Possible interviewers may include amongst others licencing representative, educators, employer, lay public and other health care professionals Tavares & Mausz (2013: 2). Therefore the use of practical skills assessment in interviews would require involvement of experts in the field to design appropriate clinical or simulated scenarios. However inclusion of practical skills assessment as a selection would require candidates to have had prior care experience (Crick 2014: 15).

2.2.4 New Developments

A relatively recently developed selection tool, which combines assessment of both cognitive and non-cognitive skills, is Situation Judgement Test (SJT). In this selection method prospective candidates are asked to respond to simulated critical events which are presented in writing or video snippets Patterson, Ashworth, Zibarras, Coan, Kerrin and Neill (2012: 851) and (Catlett & Lovan 2011: 61) in the health care professions. As to which critical events should be included in the testing, experts in the field or incumbents are utilised to design the test McKimm et al (2012: 7) and simulated scenarios are based on real work experiences. SJT is considered free of bias, cost effective, reliable and valid as a selection method utilised in selection of prospective nursing students. It also gives an opportunity for as an example involvement of a practising professional nurse in the selection of prospective nursing candidates. It is essential to include assessment of practical skills in the recruitment and selection process of prospective nursing candidates.

Limitations of the referee's report and self/personal reports when used as a selection tool are potential for bias, inability to confirm truthfulness and have a low reliability predicting future possibility of becoming a good nurse and to remain in the profession (McKimm et al 2012: 7).

The common weakness of the available selection tools is inability to assess emotional intelligence which is defined as the ability to perceive, understand and use emotions effectively. It consist of four key dimensions which are emotional awareness, thinking facilitated by emotion, understanding of emotion and their meaning and ability to regulate emotional response (Landa & Lopez-

Zafra 2010: 50). Emotional intelligence is important in nursing as the profession requires someone who has a caring and compassionate attitude which enhances ability to interact positively with patients, colleagues and the community (Lyon, Trotter, Holt, Powell & Roe 2013: 42).

Various tests are used to assess emotional intelligence. Examples of these tests include Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and Bar-On Model of Emotional-Social Intelligence (Lyon et al 2013: 42). Harper and Jones-Schenk (2012: 357) support the prefer the use of Bar-On model of assessing emotional intelligence which emphasises evaluation of intrapersonal, interpersonal, stress management, adaptability and self-motivation as key areas to be assessed for during emotional intelligence testing when recruiting nursing candidates.

The disadvantages of emotional intelligence testing are that, there are a range of tests available which make selection of a suitable test difficult. Furthermore testing can be costly, it can be difficult to eliminate cultural bias and cannot assess academic ability. Therefore emotional intelligent testing in isolation cannot be used to predict future academic success and performance in a nursing career.

Despite attempts to improve selection methods there are still challenges of poor performance leading to high failure rate and therefore delaying completion, high dropout rate during training, rising levels of litigation and misconducts cases Jones-Schenck & Harper (2014: 413). Therefore it is important to develop and put in place a more refined selection tool that would mitigate preceding challenges which are persistent.

2.3 CHALLENGES IN ADDRESSING THE ADMISSION CRITERIA

2.3.1 Shortage of Nursing Workforce

Nurse educators are faced with double edged sword of addressing shortage while at the same time ensuring that the selected candidates will qualify and uphold the standard of care.

As in other health care professions there is a worldwide shortage which is much more significant in developing countries. Even though currently the nurse to population ratio is higher in developed countries such as Europe, Australia and United States of America (USA) compared to underdeveloped countries, there is still a need to increase the number of nurses worldwide. According to Catlett and Lovan (2011: 55), it is projected that there will be a deficit of more than 280 000 nurses by the year 2020. The figures are extremely worrying in developing countries such as in Africa, Asia and South America. The shortage of nurses is aggravated by an increase demand caused by high prevalence of infectious diseases such as HIV, tuberculosis and diarrhoeal diseases, which demand more skilled nurses.

Other factor responsible for shortage of nurses is attrition due to retirement and termination of service related to illness or dismissal following misconduct. Some leave because of unfavourable working conditions and attraction to competing profession and, other individuals terminate their career in nursing prematurely when they realise belatedly that nursing is not for them (Catlett & Lovan 2011: 56) and failure to cope with the demands of the profession (Harper & Jones Schenk 2012: 354). The nursing workforce is also aging, currently the majority

of skilled professional nurses are above 50 years old and are approaching their retirement age (Underwood et al 2013: S38).

In South Africa between 2008 and 2012, 28 professional nurses were either dismissed or suspended for professional misconduct. Some of the offences they were charged for included maternity related misconducts, medication errors, poor basic nursing care, and assault of patients or colleagues, sexual abuse of patients, fraud and theft South African Nursing Council (SANC) Statistical Report 2003 - 2008). Other nurses immigrate to developed countries for better working conditions including monetary reasons and to gain more experience in the profession.

According to the South African Nursing Council website for registers and rolls 2003 – 2012, the number of nurses registered with the Council has increased by 40% in general for all categories. The population of registered nurses has also grown by 28.3% and is, augmented by those qualifying from bridging courses. Despite the large number of nurses who are being trained currently, the health sector is unable to cope with the health care needs of the disproportionately growing population and quadruple burden of disease (Strategic Plan Education and Training 2012/13- 2016/17: 8) hence the government is increasing the numbers of students to be trained yearly.

Added to the preceding discussion on reasons for the current shortage of nurses is the diminishing interest in the nursing profession (Neilson & McNally 2010: 11). Diminishing interest in the nursing profession is because of

availability of competing career opportunities for school leavers (Neilson & Jones 2012: 588). Nursing practice is significantly influenced by intrinsic factors whereas majority of young individuals are influenced predominately by extrinsic factors to decide on a career choice (Tayebi, Dehghan-Nayeri, Negarandeh & shabazi 2013: 60). Natan and Becker (2010: 310) in a survey conducted on adults attending a community social health meeting found that only 8% of the respondents were highly interested in studying nursing. This is also confirmed by the recruitment of some of the registered “job seeker” on the data base of the Gauteng Professional Job Centre in South Africa to be trained as nurses.

Diminished interest in nursing is much more prevalent in high academic achievers as they consider nursing working environment unattractive. Neilson and McNally reported (2010: 11) that some teachers discourage pupils to choose nursing as a career. Nathan and Becker (2010: 311) in a study involving adults in Israel also found low level of interest in the nursing career. Majority of participants in their study cited low level of respect, lack of power to influence and low income associated with the profession. The study confirmed that people who choose nursing as a career are intrinsically motivated and are driven by desire to help others. Shortage of nurses and selection of individuals, who are not passionate, not interested and less motivated to train as a nurse, have got long term negative implications as shown in Figure 2.



Figure 2: Implications of nursing shortage 1

Although it is reported that the interest in nursing career has diminished, there is usually an oversupply of applicants versus the number of available training positions due to limited training resources, funding and faculty (Catlett & Lovan 2011: 56). For example in the Gauteng Province, in response to the shortage of nurses, the Department of Health came into partnership with Department of Labour (DoL) to assist in the recruitment of prospective student nurses from the large numbers of “jobseekers” registered with the DoL. The strategy was amended to unemployed individuals or (jobseekers) registering their profiles on the data base of Gauteng Professional Job Centre and awarded an opportunity to apply for nursing training when applications are opened (Gauteng Department of Health (GDoH) website: (28 July 2013). The concern here is, whether these individuals so called “jobseekers” are ideal candidates to be selected and trained to become nurses?

2.3.2 Lack of Clinical Nurse's Involvement in the Selection Processes

Based on results of studies conducted by Tavares and Mausz (2013: 2), Sutherland (2012: 36) and McKimm et al (2012: 3) it would be advisable to involve nurse educators and professional nurses in clinical areas to assist in the development and designing of a selection tool and to participate fully in the actual selection processes of prospective candidates. The thought of involving carers in the selection was also supported by Rhodes & Nyawata (2010: 5). Involving service users, carers, nurse clinicians and academic staff will ensure that candidates who are selected into the nursing profession not only have academic, care and compassion but have understanding of attributes required to be a good nurse (Crick et al, 2014: 15).

The role of a nurse should not be limited to patient care but must be extended to advocating for the profession including participating in health care policy discussions, protection of the image and future of nursing profession (Tomajan, K. 2012 5). A study by Burns (2011: 200) concluded that involvement of carers and educational leaders may assist in minimizing student attrition during training and its negative economic implications. The researcher intends to analyse the selection criteria and processes for undergraduate nursing students. Furthermore to determine if nurse educators and clinical professional nurses including student nurses have suggestions on what should be done to improve the selection tools that are used to select undergraduate nursing students.

2.3.3. Attributes of a good nurse

A combination of cognitive and non-cognitive attributes determines success in nursing career. Candidates who are recruited into nursing should be motivated and have qualities of a good nurse. There is no universally agreed definition of a good nurse. Some of the attributes which are considered in the definition of a good nurse should include “caring, selfless, loyal, honest, dependable, courageous, non-judgmental, and responsible” (Catlett & Lovan 2011: 60). Candidates who have some of the above mentioned attributes are more likely to do the right thing in a practice setting. Key areas to assess qualities of a good nurse include cognitive intelligence, competency in psychomotor skills needed to render patient care, human interaction, leadership skills, emotional intelligence and good ethical and professional behaviour. A good nurse should also be able to play an advocacy role and be committed to on-going learning to keep up with changes in the profession. Furthermore a contemporary nurse has to keep up with ever modernising health care (Safadi, Saleh, Nassar, Amre & Froelicher 2011: 2).

Career choice is influenced by both intrinsic and extrinsic factors. Intrinsic factors include need to help others, having interest and commitment in the profession. Extrinsic factors would include consideration of such things as flexible working conditions, rewards, autonomy and employment security (Newton, Kelly, Kremser, Jolly & Billett 2009: 393). Candidates who are intrinsically motivated are preferred as nursing is considered a calling (Begley 2010: 525). Therefore selection of candidates for nursing has to strike a balance

between quantity to address the shortage and quality to uphold nursing standards.

Whoever is recruited and selected should have attributes of a good nurse which include assertiveness, autonomy, advocacy and ethical and professional behaviour as mentioned previously (Begley 2010: 528). Therefore it is critical to put in place robust selection processes that ensure selection of an ideal candidate and not individuals who get into nursing as a last resort. It is also important to limit the number of individuals who would only realise that nursing is not for them while they are already in the training programme, the so called “reality shock” as described by Kramer: 1974 in the article by Gambino (2010: 2539) which contribute to higher attrition and training cost Underwood et al (2013: S40), Burns (2011: 193) and Andrade and George (2013: 2). Thorough scrutiny of potential candidates is important as some individuals apply to enter nursing not on passionate grounds but just to have a job (Andrade & George 2013: 1) which would contribute to deterioration in quality of nursing care (Barigozzi & Turati 2012: 478).

2.4 THEORETICAL FOUNDATION UNDERPINNING THE CURRENT

TRENDS IN THE SELECTION CRITERIA AND PROCESSES.

A contemporary nurse should be able to think critically as often the health care environment is changing and unpredictable. Mahmoodabad, Nadrian and Nahangi (2012: 50) states that critical thinking comprises of the cognitive master plans applied for decision making, task analysis and problem solving which comes from a combination of operational skills and meta-cognitive ability. New technologies are being developed and the disease profile is not static and

is forever changing. It is therefore important to ensure that students who are being selected will be able to match the demand of the profession and keep up to date with the disease profile of the population. We need to select students with potential of becoming critical thinkers, who will be able to cope with the pressures of the nursing profession. However there isn't as yet a robust and reliable method to assess critical thinking ability which will ensure suitability of a prospective candidate before commencement of training. It is even much harder to predict that a selected nursing student would be able to acquire critical thinking skills during training especially if the traditional teaching strategies are still used in the facilitation of learning and teaching.

Various tools and test are used to evaluate critical thinking ability. In the Watson- Glaser Critical Thinking Appraisal (WGCTA) tool a combination of attitude, knowledge and skills are used whereas the California Critical Thinking Skills Test (CCTST) emphasises on ability to analyse, evaluate, infer, and deductive and inductive reasoning (Billings & Halstead 2012: 26). The California Critical Thinking Disposition Inventory (CCTDI) is used to assess if an individual is inclined to critical thinking and utilises Facione and Facione (1992) disposition subscales cited in Billings & Halstead (2012: 26). These subscales include ability to search for the truth, open-mindedness, analysis of the situation, systematic approach to finding solutions, having an inquiring mind and demonstrate maturity and self-confidence (Billings & Halstead 2012: 27).

According to Mahmoodabad et al (2012: 54), and a study done by Barkhordary, Jalalmanesh, Mahmodi (2009: 13-19) the use of WGCTA and CCTDI tools to investigate critical thinking ability 81.1% of Iranian nursing students had

uncertain disposition making their critical thinking weak compared to their counter parts in developed countries.

Critical thinking has a significant role in higher college education more especially for students in the medical fraternity and nursing students (Mahmoodabad et al 2012: 51). It impacts direct and indirect on the quality of care rendered to patients, as it influences professional decision making processes undertaken by the care givers. Figure 3 depicts the influence the essential constructs of critical thinking that have been widely used to design the assessment tools to select best candidates to the nursing profession education.

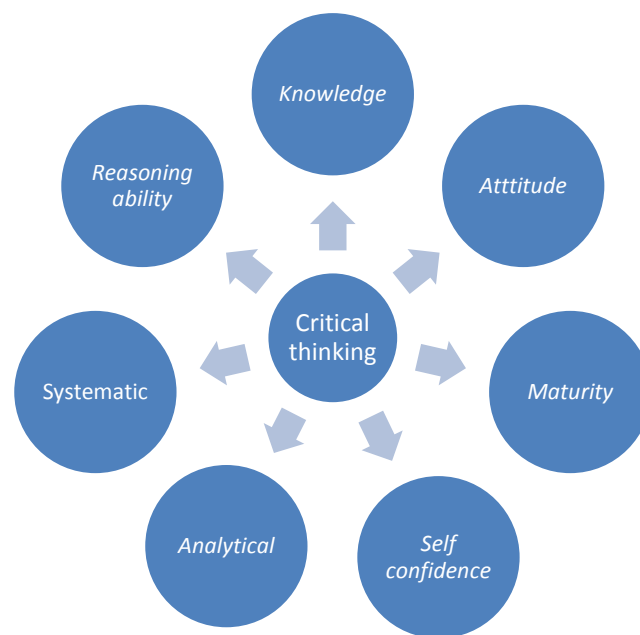


Figure 3: Critical Thinking Constructs 1 (Source Billing & Halstead 2012)

It is paramount that the selection criteria and processes used for prospective students are able to identify candidates that possesses the required knowledge, skills and disposition of critical thinking that will enhance their capacity to become competent nurse practitioners (Smith 2012: 172). Irrespective of the

type of nursing education, critical thinking is essential in the professional preparation for nurses (Kaddoura 2010: 424). It is important that prospective nursing candidates are assessed and evaluated for core competencies necessary and needed in the nursing profession.

In an abstract by Yu-Chin Chen (2010: 17) stated that for competency to be achieved in nursing, candidate should possess basic behavioural attributes and mastery of advanced theoretical and practical skills. Behavioural attributes are depicted through gentleness, willingness to serve, ability to use sound judgement and a keen observer, efficiency, skilfulness, readiness in taking responsibility and accountability. According to Yu-Chin Chen (2010: 17) mastery of skills will be demonstrated by general care, communication and collaboration, self-development, innovation and research and the ability to adjust to stress. The author also emphasised that critical thinking is essential and should be included in the curriculum and assessed for prior to training of a novice to an expert professional with the intention of producing a competent nurse practitioner.

According to Romeo (2010: 379) critical thinking is an important component in nursing education therefore it is essential for nurse leaders and educators to ensure that they come up with strategies of assessing, developing and evaluating critical thinking prior to entering into nursing as it is also a predictor of performance and form basis of professional judgement during clinical practice and interaction with colleagues and patients.

Critical thinking does not only influence students' competencies and academic performance and progression, it has a significant impact on the development of the curriculum, strategies of teaching and learning (Abell, Jones, Williams & Iartey 2013: 7) and the selection of the type of student to be recruited, selected and trained. It has broad implications on the education and training of future nursing students.

2.5 CONCLUSION

This chapter looked at the context, the traditional practices, the current debates and new developments in the selection criteria and processes into professional nursing education with the view of understanding the current trends. It also looked at the challenges in addressing the admission criteria and concluded with the theoretical foundation underpinning the current practices in the selection criteria and processes into professional nursing education around the world. In summary, the move from tradition to more innovative ways to recruiting and selecting candidates to professional nursing education is well documented in the literature.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. INTRODUCTION

The study was conducted with the aim of analysing the selection criteria and processes followed by nursing colleges in the Gauteng Province to admit students into Basic Nursing Diploma Programme. This was done with the view of proposing selection criteria and processes that would secure the admission of the best candidates to the Basic Nursing Diploma Programme in public nursing colleges in Gauteng Province.

The third chapter outlines the research methodology followed to address the above purpose. It describes the methodological foundation, the research design, the research setting, the population, the sample and sampling technique, the data collection method, data management and analysis, and ethical considerations.

3.2 METHODOLOGICAL FOUNDATION

The study was conducted within the positivist quantitative approach. According to de Vos, Strydom, Fouche and Delport (2013: 6) positivist believed that a phenomenon can either be observed or experienced and that knowledge is acquired and derived through accrued and confirmed actualities. It involves collection of quantitative data, and the use of large data sets and statistical analysis (Creswell et al 2014: 19). Quantitative approach follows deductive form of reasoning which allows the researcher to formulate hypothesis to be tested,

or generating hypothesis, or to establish causal relationships (de Vos et al 2013: 144).

Quantitative approach enables the researcher to use rigorous processes, meticulous measurement methods, and representative sample and conduct the study in a natural environment (Brink et al 2014: 112). Quantitative approach allows objectivity, eliminates biases during data collection and data analysis therefore enhancing accuracy and credibility of the study (Leedy & Ormrod 2010: 96).

In this study, the researcher assumed that the current selection criteria and processes do not ensure the selection of best candidates to the professional nursing education, and that nursing students and nurse educators can objectively provide information regarding the current status of these criteria and processes. It was against these assumptions that the positivist quantitative approach was selected to guide the study.

3.3 RESEARCH DESIGN

Quantitative descriptive survey design with self-completion questionnaire was used to generate data for this study. This design was congruent with the methodological approach, the aim and objectives of the study.

A descriptive research is specifically interested in measuring a variable or set of variables as they exist in the natural environment. It is not concerned with relationships between variables but rather with the description of a single variable or separate descriptions of individual variables when dealing with multi-variables (Groves, Burns & Gray 2013: 217). Further, researcher using a

descriptive survey design is more interested in the description of a particular group of individual at a particular point of time (Grove et al 2013: 225)

In this study, the researcher was interested in providing separate descriptions of the importance and relevance of the selection criteria and processes used in public nursing colleges with regard to selecting the best nursing students for Basic Nursing Diploma Programme in the Gauteng Province.

Authors (Polit & Beck 2012: 265) argue that the use of a self-completion questionnaire in a survey has the advantage of providing the respondent with the opportunity to complete the questions in their own convenience without fear of victimisation. Being a lecturer in one of the public nursing college in Gauteng, the researcher viewed the use of the self-completion questionnaire more appropriate as respondents will not feel threaten by the physical presence of the researcher.

3.4 RESEARCH SETTING

The study took place at three public nursing colleges in the Gauteng Province. Gauteng Province has three public nursing colleges which offer basic nursing diploma programme. Two are situated in Pretoria and one in Johannesburg. The three colleges offer the same curriculum and use the same selection criteria and processes. These criteria and selection processes are set by the Department of Health.

3.5 STUDY POPULATION

The study population is defined as a set of elements that have certain common characteristics that the researcher focuses upon and to which the results will be generalised (Wood & Ross-Kerr 2011: 152). For this study, the study population consisted of all nurse educators and student nurses in the three public nursing colleges in Gauteng Province. Participants were familiar with the selection criteria and processes used in the public nursing colleges. Student participants underwent through the process during the application period. Some nurse educators had previously served part in the selection panel as members of the selection committee.

According to the records of the three institutions, the three colleges have a staffing of 300 nurses educators for a student's population of 842 doing the four year basic nursing diploma programme. These numbers were considered as the study population.

3.6 SAMPLE AND SAMPLING METHOD

A sample is defined as a subset of the study population (Leedy & Ormrod 2010: 204). Sampling refers to the process of selecting a proportion of the study population to represent the entire population so that inferences about the population can be made (Babbie & Mouton 2014: 197). For this quantitative descriptive design, the researcher used a sampling frame from which the eligible respondents were selected (Burns & Grove 2013: 357).

The study used a stratified systematic random sampling method to select the participants. Stratified systematic random sampling is a type of probability sampling methods. In probability sampling every single element of the study population has an equal opportunity to be included in the sample (de Vos et al 2013: 230). The researcher opted for this method because the study participants are heterogeneous as they include nurse educators and student nurses (de Vos et al 2013: 230).

In this study the nurse educators were grouped in one stratum while nursing students in the other stratum. The researcher compiled a sampling frame for each stratum. The strata were arranged in alphabetical order according to their surnames. The student identify number or employment identify number was assigned against each person surname. The researcher picked up a number from the middle of the list and continued to select every second person above the first selected number. The same process was carried out to select participants from the bottom part of the list. At the end of this process, a total of 421 nursing students and 150 nurse educators were selected. The researcher was satisfied with the sample size as at least 50% of each stratum was selected. Authors (Leedy & Ormrod 2010: 213) view 50% of the study population as a representative sample.

3.7 DATA COLLECTION

3.7.1 Description of Data Collection Instruments

The researcher used the conceptual framework of the study (see Figure 1) to design the self-completion questionnaires. The researcher designed two set of self-completion questionnaires (one for nurse educators and the other for nursing students). However, the difference was only on the first section of the questionnaire. Sections B and C contained the same questions for the two groups (see Appendix 1). The questionnaires consisted of three main sections: (1) general information (Section A), (2) current selection criteria and processes (Section B), (3) Changes needed in the selection criteria and processes (Section C).

Section B consisted of 13 items to be evaluated for their importance and relevance to selecting best candidates to Basic Nursing Diploma Programme, and one open-ended question related to changes needed in the current selection criteria and processes in order to select best candidates for Basic Nursing Diploma Programme. Respondents were also requested to provide the rational for those changes (see Appendix 1).

Section C consisted of two items related to the introduction of critical thinking assessment and the assessment of the caring attributes in the selection process of basic nursing diploma students. These two items were evaluated for their importance and relevance using Yes or No answers (see Appendix 1).

3.7.2 Validity and Reliability of the Instruments

The validity of an instrument determines the extent to which it measures what it is supposed to measure. It can be achieved through face validity and content validity. Face validity refers to whether the instrument looks as though it is measuring the appropriate construct and can persuade the people to participate in the study (de Vos et al 2013: 173). Content validity is concerned with the degree to which an instrument contains an appropriate sample of items for the construct being measured and adequately covers the construct domain (Polit and Beck 2012: 336).

The researcher used a conceptual framework to enhance the content validity of the instrument. In addition, the developed instrument was scrutinized by the research supervisor and the principals of the three colleges. They were all satisfied with the questionnaires. Clear instructions on how to complete the questionnaire and to return the completed questionnaire were included in the first page of the questionnaire (see Appendix 1a and 1b). The questionnaire with the objectives of the study was given to a statistician to assess if the instruments will generate data to address the objectives of the study. Minor corrections were suggested and implemented before data collection.

The external validity was increased by the probability sampling and the standardization of the data collection instrument. The sample size calculation ensured the representativeness of the sample and consequently enhanced the external validity. The researcher ensured that all the recommendations were based on the results of the study and no attempt was made to generalize the

results outside of the study population.

Polit and Beck (2012: 331) define reliability as the consistency with which the target attributes are measured resulting in accuracy in measurement therefore minimizing errors of measurement. In ensuring reliability, the researcher with the assistance of the supervisor and a qualified statistician as an expert in the field formulated a clear, concise instrument, with clear, precise questions, that was able to measure the phenomenon under study.

3.7.3 Data Collection Process

Data were collected over a period of 4 weeks (1st to 30th October 2015). In total, 421 questionnaires were distributed to nursing students and 150 questionnaires to nurse educators. The questionnaires were put in sealed envelope with the surname of the participants and given a code for the institution. The students' questionnaires were distributed by the students' affairs. They were instructed to return the completed questionnaires in a dropping box provided for the study at the same office. Similar arrangements were made for the nurse educators via the secretariat of the principals.

A consent form with an information sheet was attached to each questionnaire. The respondents were given a week to complete and return the questionnaire with the signed consent form. However, a three weeks extension was given at the end of the first week in order to enhance the response rate.

3.8 DATA MANAGEMENT AND ANALYSIS

Quantitative data analysis involves sorting the collected information into components or elements in order to test the hypothesis or to answer the identified research problem (Brink et al 2014: 57). For this study the researcher scrutinized each returned questionnaire to ensure that all questions were answered as expected. STATA Statistical Analysis software was used for data capturing, editing and analysis. Each questionnaire was given a unique number to facilitate error tracking where necessary. Variables were given value numbers for easy of analysis. The data was screened and checked for errors and these were corrected where possible in the data file.

Summary descriptive statistics were conducted to describe and summarize data. The researcher used frequency tables and percentage distribution to describe the results. Inferential statistics, Pearson's r , Chi-Square test and Fisher's exact test were used for comparison. The p -value of less than 0.5 was considered statistically significant.

3.9 ETHICAL CONSIDERATIONS

The study was conducted within the universal ethical principles respect for person, beneficence, non-maleficence, and justice (de Vos et al 2013: 115) and the ethics guidelines for postgraduate research prescribed by the University of South Africa. The proposal of this study was approved for its scientific merit by the Higher Degree Committee of the Department of Health Studies and the ethical clearance to conduct the study was obtained from the Ethics Committee of the same department (see Appendix 2). Furthermore

permission was granted by the Gauteng Department of Health and the respective public nursing colleges (see Appendix 3).

The researcher adhered to the steps outlined in the approved proposal. The researcher maintained permanent contact with the supervisor and the final report was based on the collected data. The respondents were informed of the aim of the study, the questionnaire was anonymous and confidentiality was maintained throughout the research process. Participation was absolutely voluntary and all the participants were informed of their right to withdraw from the study with no penalty. The principle of beneficence and non-harm were guaranteed during the process. Each respondent in the study was treated fairly and the right to privacy was respected, maintaining the principle of justice (Polit & Beck 2012: 155). The proposed study had no potential to cause physical or psychological harm to the respondents, and all respondent were more than 18 years old.

3.8 CONCLUSION

The third chapter described the methodology followed by the researcher to address the research question. It provided the rational and motivation for the selected methodology. It also examined how data were processed in the study and how the ethical principles were observed. In the next chapter the results of the main findings are presented and discussed.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF THE RESULTS

4.1. INTRODUCTION

This chapter presents and discusses the results of the main findings of the study. It is structured according to the objectives of the study. These results are introduced by the presentation and discussion of the characteristics of the respondents. A conclusion is provided at the end of the chapter.

4.2. CHARACTERISTICS OF THE RESPONDENTS

4.2.1 Descriptions of the respondents' characteristics

Of the 421 questionnaires distributed to nursing students, 358 (85.5%) were returned and considered for analysis. Of the 150 questionnaires distributed to nursing educators, 134 (89.3%) were returned and included in the final analysis. Out of the 571 questionnaires distributed in total, 492 (86.2%) were returned. The high return rates for both strata can be interpreted as the interest that the participants gave to the topic.

Nursing students were described in terms of: age, gender, current level of study, application route (via Gauteng Professional Job Centre or Nursing Colleges), post matric qualification, first carrier choice after matric, and existence of healthcare professionals in the family. Nurse educators were described in terms of age, gender, highest level of education, knowledgeable about the selection criteria and processes, previous participation in the selection process, and envisaged role in the selection process for respondents with no

previous participation in the selection process. The characteristics of the two groups of the respondents were analysed separately and summarised in Tables 1 and 2 respectively.

Table 1: Frequency Distribution of the Nursing Students' characteristics (N=358)

Variables		Frequency	Percentage (%)	Cumulative percentage
Age (in years)	16 – 20	25	7.0	7.0
	21 – 25	112	31.3	38.3
	26 – 30	88	24.6	62.9
	31 – 35	44	12.3	75.2
	36 – 40	34	9.5	84.7
	41 – 45	23	6.4	91.1
	46 – 50	14	3.9	95.0
	51 and above	2	0.6	95.6
	Incomplete	16	4.5	100.0
Gender	Female	312	87.2	87.2
	Male	43	12.0	99.2
	Incomplete	3	0.8	100.0
Application route	Gauteng Professional Job Centre	268	75.0	75.0
	Nursing Colleges	90	25.0	100.0
Level of study	Second Year	146	40.8	40.8
	Fourth Year	212	59.2	100.0
Post-Matric Qualification	Yes	187	52.0	52.0
	No	171	48.0	100.0
Nursing as the first carrier choice after Matric	Yes	141	39.0	39.0
	No	217	61.0	100.0
Existence of healthcare professional in the family	Yes	208	58.0	58.0
	No	150	42.0	100.0

As indicated in Table1, of the 358 nursing students who returned the questionnaires, 78.7% (n=269) were between 19 and 35 years old, 87.2% (n=312) were females, 75.0% (n=268) applied via the Gauteng Professional Job Centre, 59.0% (n=212) were at the fourth year of their studies, 52.0% (n=187) had post matric qualification, 60.0% (n=215) did not consider nursing as their first carrier choice, and 58.0% (n=208) do have a healthcare professional in their family.

As shown in Table 2, of the 134 nurse educators who returned the questionnaires, 89.5 % (n=120) were above 40 years old, 96.3% (n=129) were females, and 67.2% (90) had a bachelor degree as their highest qualification. All 134 (100.0%) nurse educators were knowledgeable about the selection criteria and processes used at their institutions. Of the 134, 68.0% (n=91) have participated in the selection process as either members of the interview panel or central selection committee. Of the 43 who did not participate in the selection activities, 86.0% (n=37) wished to participate as members of the interview panel.

Table 2: Frequency Distribution of the Nurse Educators' characteristics (N=134)

Variables		Frequency	Percentage (%)	Cumulative percentage
Age (in years)	26 – 30	2	1.5	1.5
	31 – 35	2	1.5	3.0
	36 – 40	10	7.5	10.5
	41 – 45	16	11.9	22.4
	46 – 50	26	19.4	41.8
	51 and above	74	55.2	97.0
	Incomplete	4	3.0	100.0
Gender	Female	129	96.3	96.3
	Male	5	3.7	100.0
Highest Qualification	Diploma	3	2.2	2.2
	Bachelor Degree	90	67.2	69.4
	Honours' Degree	17	12.7	82.1
	Masters' Degree	23	17.2	99.3
	Doctoral Degree	1	0.7	100.0
Knowledge about the selection criteria and processes	Yes	134	100.0	100.0
	No	0	0.0	100.0
Previous participation in the selection process	Yes	91	68.0	68.0
	No	43	32.0	100.0
Preferred role in the selection process if given opportunity (N=43)	Interview panel	37	86.0	86.0
	Central selection Committee	6	14.0	100.0

4.2.2 Discussion

The results of the respondents' characteristics as presented in this section are in line with the global and local trends in nursing education and profession. The large proportion of females among the respondents (87.2% among students and 96.3% among educators) corroborate with the female dominated nature of the nursing profession around the world (Karabacak, Uslusoy, Alpar & Bahcecik 2012: 538). Of great concern when looking at the respondents' characteristics are the facts that only 38.3% of the students were below the age of 25 years with an ageing teaching staff (89.5% above 40 years) and 61.0% of students did not consider nursing as their first choice carrier despite the fact that 58.0% of them have a healthcare professional as a relative. It appears that nursing has become less attractive to young girls and majority do come to nursing for job security.

This study showed that 52.0% of the candidates had post matric qualification in other disciplines and 75.0% were recruited from the Gauteng Professional Job Centre which is a government job placement agency established to curb unemployment among youths. Previous studies have shown the same trend regarding nursing as the first carrier of choice among youths and an ageing teaching staff in nursing education institutions (Karabacak et al 2012: 542; Nathan & Becker 2010: 311; Neilson & McNally 2010: 11).

With caring as the distinguishing nature of the nursing profession, the above findings have significant implications for the selection criteria and processes

used at the public nursing colleges in Gauteng. The results also suggest that the government effort to mitigate shortage of professional nurses in public facilities will not achieve the expected results as these characteristics are associated with high attrition rate and high incidents of professional misconducts (Cartlett & Lovan 2011: 56; Neilson & Jones 2012: 588).

Further, the results indicate that 67.2% of nurse educators hold only a bachelor degree while the majority of students are matured (61.7%) and hold post matric qualifications (52.0%) with a significant number (25.0%) having worked in health facilities. In such circumstances, students may not see the nurse educators as effective role model, which may reinforce their lack of interest in nurturing the caring attributes. Previous studies have associated the nurse educator's qualification and experience to low attrition rate and low incidents of professional misconducts (Cartlett & Lovan 2011: 56; Underwood et al 2013).

The willingness of nurse educators to play active role in the selection processes of students should be viewed as a positive step toward the improvement of the current processes. The literature suggests that nurse educators and professional nurses from clinical settings should be more involved in the selection of professional nurses (Karabacak et al 2012: 542).

4.3 RESPONDENTS VIEWS ON CURRENT SELECTION CRITERIA AND PROCESSES

Data presented and discussed under this section derived from the second section of the questionnaire, which addressed the first objective of the study. The first objective of the study was to describe the views of nursing students and nurse educators regarding the current selection criteria and processes in terms of the following:

(1) The importance and relevance in securing the admission of the best candidate to the Basic Nursing Diploma Programme in the Gauteng Province; and

(2) The changes needed with the rational in order to secure the selection of best candidates to the Basic Nursing Diploma Programme in the Gauteng Province.

4.3.1 Presentation of the main findings

4.3.1.1 Respondents' views on the importance and relevance of the current selection criteria and process

The respondents' expressed their views by evaluating 13 items (with Yes or No) related to the general minimum requirements (4 items), specific requirements (4 items), and the selection processes (5 items) regarding their importance and relevance for ensuring the selection of best candidates to Basic Nursing Diploma Programme in Gauteng. The items related to general minimum requirements and selection processes were answered by all the respondents, while those related to specific requirements were answered by internal

candidates and nurse educators' only. The results of the summary descriptive analysis of the respondents' views are summarised in Table 3. The cross tabulation analysis of the views of nursing students and nurse educators did not show any significant differences. Therefore, they were excluded from the presentation and discussion.

Of the 13 items measured, 9 (64.0%) were viewed by more than 70.0% of the respondents as important and relevant in securing the selection of best candidates to Basic Nursing Diploma Programme in public nursing colleges in Gauteng. Two items each, from the minimum general requirements and the selection processes were viewed by more than 70.0% of the 492 respondents' as less important and relevant in securing the selection of best candidates to Basic Nursing Diploma Programme in public nursing colleges in Gauteng. As shown in Table3, academic performance in English and Life Science or Biology, recruitment of candidates with nursing background, and the medical surveillance were viewed by less than 30.0% of the 492 respondents as important and relevant in securing the selection of best candidates to Basic Nursing Diploma Programme in public nursing colleges in Gauteng.

There was a high level of agreement regarding the importance and relevance of seven items. The APS or M score and age limitation for the general selection criteria, all four specific selection criteria, and the recruitment of candidates irrespective of the nursing background were viewed by more than 80% of the 492 respondents as important and relevant in securing the selection of best candidates to Basic Nursing Diploma Programme in public nursing colleges in Gauteng.

Table 3: Respondents views regarding the importance and relevance of the current selection criteria and processes

Items	Importance		Relevance		Important & Relevant by 70% of the respondents
	Yes	No	Yes	No	
Minimum general requirements (N=492)					
1. English proficiency with a minimum score of 4 or symbol D (High Grade) or C (Standard Grade) in matric	66 15.4%	426 86.6%	181 27.5%	311 72.5%	No
2. Life Science with a minimum score of 4 or Biology with symbol D (higher Grade) or C (Standard Grade) in Matric	136 27.6%	356 72.4%	101 20.5%	391 79.5%	No
3. APS minimum score of 25 or M score of 15	443 90.0%	49 10.0%	436 88.6%	56 11.4%	Yes
4. Age limit (35 years for external and 45 years for internal candidates)	430 87.4%	62 12.6%	423 86.0%	69 14.0%	Yes
Specific requirements (N=224)					
5. Must be a South African Citizen	211 94.2%	13 5.8%	200 89.3%	24 10.7%	Yes
6. Completion of probation period	190 85.0%	34 15.0%	192 86.3%	32 13.7%	Yes
7. Approval of study leave	212 94.6%	12 5.4%	206 92.0%	18 8.0%	Yes
8. Absenteeism profile	202 90.0%	22 10.0%	192 86.0%	32 14.0%	Yes
Selection processes (N=492)					
9. Recruitment of candidates irrespective of the nursing background (external candidate)	396 80.4%	96 19.6%	447 91.0%	45 9.0%	Yes
10. Recruitment of candidate with nursing background (internal candidates)	134 27.2%	358 72.8%	138 28.0%	354 72.0%	No
11. Psychometric Test	372 75.6%	120 24.4%	417 85.0%	75 15.0%	Yes
12. Pre-selection interview	368 75.0%	124 25.0%	368 75.0%	124 25.0%	Yes
13. Medical surveillance	139 28.0%	353 72.0%	140 28.5%	352 71.5%	No

All items which were viewed by at 70% of the respondents as important and relevant were regarded by the researcher as the most effective in achieving the selection of best candidates to basic nursing diploma programme in public nursing colleges in Gauteng.

In order to establish the relationships between the importance and relevance of these items as viewed by the respondents, a cross tabulation analysis was carried out. All these items were statistical significant with a P-value of 0.00, meaning that the respondents were consistent in their views of the importance and the relevance of each item in securing the selection of best candidates to basic nursing diploma programme in public nursing colleges in Gauteng.

4.3.1.2 Changes needed with the rational in the current selection criteria and process as viewed by the respondents

The respondents were asked one open-question regarding the changes they would like to see in the current selection criteria and processes in order to secure the selection of best candidates. This question was associated with follow-up questions regarding the rational for the suggested changes.

Of the 492 respondents, 436 (89.0%) answered the above questions. The answers were grouped according to their characteristics and quantified according to the number of the respondents who mentioned them. Five major changes related to the general selection criteria, and selection process were identified and quantified. The results are summarised in Table 4 with the associated rational.

Table 4: Changes in the current selection criteria and processes as viewed by the respondents

Changes needed	Number of respondents who mentioned the needed change	Associated rational
Minimum requirements		
1. Life science or Biology regardless of score	382	<ul style="list-style-type: none"> • The score is arbitrary • The score does not predict academic performance in nursing programme
2. English proficiency regardless of score	379	<ul style="list-style-type: none"> • The score is arbitrary • The score does not predict academic performance in nursing programme • The score discriminates against the African language speakers • Disregarding the score will promote the value of the Constitution
3. Age limit should be 35 year for all applicants	364	<ul style="list-style-type: none"> • Reduce shortage as graduate will work for longer • Avoid discrimination on the basis of age between internal and external candidates.
Selection process		
4. Application should be opened to all candidates internal candidates irrespective of their nursing background	398	<ul style="list-style-type: none"> • The system is viewed as discriminatory against the non-nursing internal candidates • It will provide equal opportunity and the increase of the pool of internal candidates
5. Use of multiple phase interview during the selection process	436	<ul style="list-style-type: none"> • Unfair to the students • Avoid biases in the current single interview system • Allow the introduction of other assessment methods, such as critical thinking

With regard to the general selection criteria, 382 (87.6%) of the 436 (100.0%) respondents' who answered this question suggested that candidates with Life Science or Biology must be shortlisted irrespective of the scores obtained, and 364 (83.5%) of the 436 (100.0%) respondents suggested that the age limit should be 35 years for all applicants (internal and external). Similar suggestions were made by 379 (87.0%) of the 436 respondents' who answered this question regarding the score in English proficiency. Although the respondents agreed on the inclusion of Biology/Life Science and English in the selection criteria, they questioned the validity of the attributed score or symbol. They felt that the minimum score or symbol were arbitrary and lack evidence to support its association with the academic performance in the nursing programme. In addition, English as the sole language was viewed as discriminatory to other African languages and against the value of the Constitution.

In relation to the selection process, 398 (91.0%) of the 436 (100.0%) respondents' who answered this question suggested that the application should be opened to all internal candidates irrespective of the nursing background. While, all 436 (100.0%) respondents who answered this question suggested that multiple interviews should replace the current single interview practices. The exclusion of the internal candidates with non-nursing background from application was viewed as discriminatory by the respondents. They felt that the removal of nursing background as a pre-requisite for application to basic nursing diploma programme will provide an equal opportunity to all those who are interested in nursing and will also lead to an increase in the pool of internal candidates.

4.3.2 Discussion of the main findings

The respondents' views on the current selection criteria and processes should be interpreted together with the suggested changes and the supporting rationale derived from the analysis of the open-ended questions.

The views of the respondents regarding the importance and relevance of the English and Life Science/Biology subjects are related to the suggested changes. They questioned the relevance and the importance of the academic achievement in these subjects in determining the success in the nursing programmes. The academic achievements in specific subjects are widely used as pre-requisites for nursing education programmes (Jones-Schenk and Harper 2013:413-420).

However, during the last decades, authors argue that the use of academic achievement is not sufficient to establish whether a candidate is intrinsically motivated to study nursing and will have attributes of a good nurse (Jones-Schenk & Harper 2013:413-420 & Gambino 2010: 2538). It is argued that restricting the selection to English and Science subjects may be denying opportunity to individuals who are passionate about nursing but did not achieve the required score.

The issue of English raises the question of language superiority within the democratic South Africa and should be given special attention as suggested by the respondents. Discrepancy in the age limit between the two pools of candidates was interpreted following within the Constitution of the country.

Continued recruitment of internal candidate up to the age of 45 years for a four year programme seems unproductive as these graduates can retire from 60 years. Lowering and harmonising the age limit will not only address the unfairness but it also constitute good practice (McKimm et al 2012: 5).

Although nurse educators and students nurses felt that psychometric testing plays a significant role as a selection process for prospective candidates, its reliability regarding prediction of academic performance was queried in a study done by Khan et al (2013:46). Both groups of participants in the current study considered pre-selection interviews as important and relevant, irrespective of many short comings highlighted by McKimm et al (2012: 5) and Sutherland (2012: 35).

Students nurses and nurse educators are however not content with how interviews are conducted and have recommended that the process should be improved by introducing multiple interviews. Questions regarding the use and need to modify the interviews used in selecting individuals for nursing career were also raised in a study by Lunenburg (2010:6). Multiphase interviews is useful for evaluating personal attributes (Conlon et al 2013:112) however its major drawback its inability to assess emotional readiness. Multiphase interview as suggested by the respondents seems to be suitable for internal candidates. Tavares and Mausz (2013:4) suggest that simulated based assessment should be included especially when selecting candidates for health care related professions. One way that has been suggested to evaluate caring attributes is

to get input from service user, as to how this can be incorporated we still do not have a method yet.

In summary, it transpired from the results of this study that the respondents considered the current selection process as ineffective in attracting best candidates for Basic Nursing Diploma Programme in public nursing colleges in Gauteng. They suggested changes that need to be implemented to strengthen the requirements and processes in line of the constitution of the country and contemporary. The views of the respondents are supported by the literature which suggests that tradition selection methods are unable to definitely identify attributes of a candidate who would end up becoming a good nurse. It is argued that emotional ability and related competencies are necessary for one to function as a good nurse (Benson et al 2010: 49). Methods that look at the communication skills, ability to deal with ethical issues, cultural sensitivity, resilience, personal integrity and becoming a team player are more relevant to selecting nursing students (McKimm et al 2012: 5).

4.4 RESPONDENTS VIEWS ON THE INTRODUCTION OF CONTEMPORARY SELECTION METHODS IN THE ADMISSION CRITERIA OF STUDENTS

This section deals with the second objective of the study, which looked at the respondents' views on the introduction of contemporary assessment into the selection process of basic nursing diploma students at the public nursing colleges in Gauteng. They were asked to indicate if they view the introduction of two assessments methods (critical Thinking Ability and Caring Attributes) into the selection criteria and process as important and relevant in securing the

selection of best candidates into basic nursing diploma programme in public nursing colleges in Gauteng (see section C of the questionnaire).

4.4.1 Presentation of the main findings

The results of this section are summarised in Table 5. Of the 492 respondents, 451 (92.0%) and 392 (80.0%) viewed the introduction of critical thinking assessment in the selection of nursing students as important and relevant in securing the selection of best candidates to Basic Nursing Diploma Programme in public nursing colleges in Gauteng. Of the 492 respondents, 476 (98.0%) and 472 (96.0%) viewed the introduction of caring attributes assessment in the selection of nursing students as important and relevant in securing the selection of best candidates to Basic Nursing Diploma Programme in public nursing colleges in Gauteng.

Further analysis was performed to establish the relationships between the importance and relevance of the two items as viewed by the respondents. Both items were statistical significant with a P-value of 0.00, meaning that the respondents were consistent in their views of the importance and the relevance of each item in securing the selection of best candidates to basic nursing diploma programme in public nursing colleges in Gauteng.

Table 5: Respondents views regarding the introduction of contemporary methods into the selection process

Items	Importance		Relevance		Important & Relevant by 70% of the respondents
	Yes	No	Yes	No	
1. Introduction of Critical Thinking Assessment in the selection of nursing students	451 92.0%	41 8.0%	392 80.0%	100 20.0%	Yes
2. Introduction of Caring Attributes Assessment in the selection of nursing students	476 98.0%	16 2.0%	472 96.0%	20 4.0%	Yes

4.4.2 Discussion of the findings

Incorporating critical thinking assessment and the assessment of the caring attributes as supported by the respondents is in line with the contemporary practices in professional nursing education. In a study conducted by Mahmoodabad et al (2012: 50) critical thinking was viewed as the most significant methods for the selection of nursing and medical students into the training programmes. Ability to think critically has been suggested as the best way to evaluate emotional readiness of applicants, possession of the required knowledge and skills which will in turn enhance their capabilities to become competent nurse practitioners (Smith 2012: 177). Critical thinking can be assessed by using case studies, scenarios or requesting candidates to develop concept maps to test how prospective candidates are able to formulate, organise and to solve complex problems (Potgieter 2012: 5).

Yu-Chin Chen (2010: 17) argued that the assessment of basic caring attributes such as gentleness, willingness to serve, ability to use sound judgement, keen observer, and readiness to take responsibility and accountability are essential attributes that prospective candidates should possess in order for them to progress in acquiring theoretical and practical skills. Authors (Gambino 2013: 2538 & Romeo 2010: 379) urge nurse educators and leaders to come up with strategies of assessing, developing and evaluating critical thinking of candidates prior to entering the training programme. Nursing colleges can make use of tools that are available to evaluate critical thinking ability and caring attributes. For examples, the Watson- Glaser Critical Thinking Appraisal (WGCTA) tool has been used to measure attitude, knowledge and skills whereas the California Critical Thinking Skills Test (CCTST) can measure the ability to analyse, evaluate, infer, and deductive and inductive reasoning (Billings & Halstead 2012: 26). The California Critical Thinking Disposition Inventory (CCTDI) is another tool that can be used to assess if an individual is inclined to critical thinking (Billings & Halstead 2012: 27).

4.5 SUMMARY

The aim of this study was to analyse the selection criteria and processes followed by nursing colleges in the Gauteng Province to admit students into Basic Nursing Diploma Programme with the view of proposing selection criteria and processes that would secure the admission of the best candidates to Basic Nursing Diploma Programme in public nursing colleges in Gauteng Province. The results presented and discussed in this chapter allowed the researcher to propose the selection criteria and processes illustrated in Figure 4.

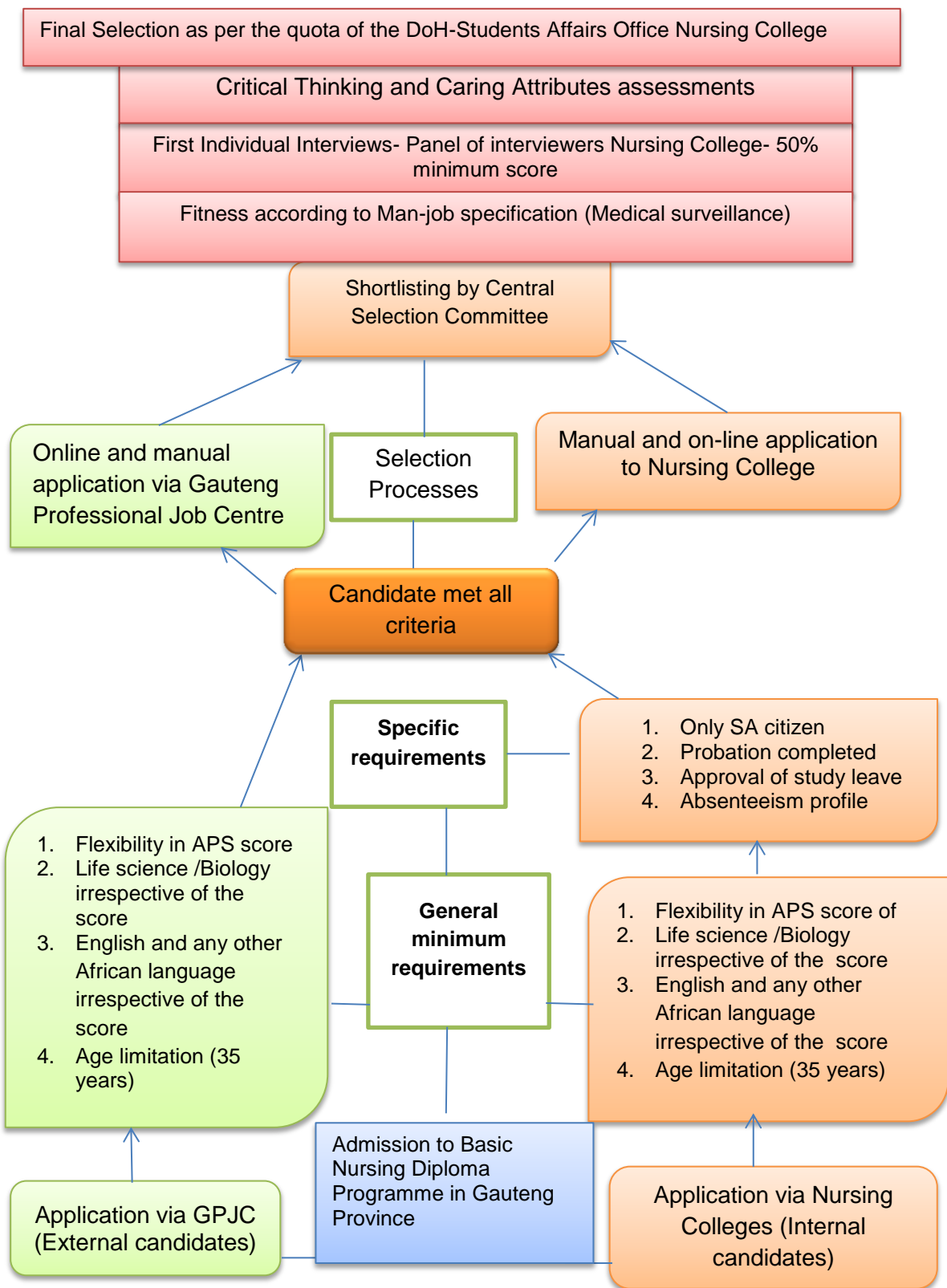


Figure 4: Proposed Admission and Selection Framework 1

CHAPTER FIVE

CONCLUSION, RECOMMENDATIONS, AND LIMITATION OF THE STUDY

5.1 CONCLUSION

The study was motivated by the concerns expressed by nurse educators and clinical preceptors regarding the profile of students admitted to the Basic Nursing Diploma Programme at public nursing colleges in Gauteng. Due to severe shortage of qualified nurses and high unemployment rates among youths in South Africa, the public nursing colleges were asked by the Gauteng Department of Health to use the pools of job seekers at the Gauteng Professional Job Centres and candidates with nursing background working at different health facilities in the province to select candidates for Basic Nursing Diploma Programme. Public nursing colleges were compiled to use the admission criteria designed by the Gauteng Department of Health.

While these criteria could be seen as a mean of standardising the admission into the Basic Nursing Diploma Programme at public nursing colleges, anecdotal reports from nurses in education institutions and clinical practices indicated a lack of professionalism, high attrition rates among these cohorts of students. They attributed these problems to among others the recruitment of candidates who may not have nursing as their first career of choice and the inabilities of the current selection tool to identify candidates that have the essential qualities required by the nursing profession. The researcher believed that any meaningful selection criteria and processes should be on the views expressed by people who have been through the process as students or

educators. Therefore, this study attempted to analyse the selection criteria and processes followed by nursing colleges in the Gauteng Province to admit students into Basic Nursing Diploma Programme with the view of proposing selection criteria and processes that would secure the admission of best candidates to Basic Nursing Diploma Programme in public nursing colleges in Gauteng Province.

Two objectives were used to analyse the selection criteria and processes as viewed by the nursing students and nurse educators in three public nursing colleges in Gauteng. A quantitative descriptive survey design was used to address the objectives as described in Chapter three. The results of the summary descriptive analysis of the returned questionnaires as presented and discussed in Chapter four confirm that some of the selection criteria and processes used at the public nursing colleges were viewed as less important and irrelevant in securing the selection of best candidates to Basic Nursing Diploma Programme. Based on the results of the analysis, the researcher proposed a framework to guide public nursing colleges in selecting best candidates to Basic Nursing Diploma Programme in the province.

5.2 RECOMMENDATIONS

Public nursing colleges are the main supply of nursing workforce in the province. It is therefore important for the nursing colleges to ensure that candidates who are selected for nursing programmes have the potential to remain in the profession, and most importantly to provide quality and safe nursing care. The researcher believed that the operationalization of the propose framework will guide the nursing colleges to achieve the above

objective. It is therefore recommended that:

1. Management team of public nursing colleges should advocate for the review of the existing admission criteria and processes
2. Human rights values and the national transformation policies should be taken into considerations in the review process
3. Nurse educators and researchers should assist the nursing college management team with the development of tools that assess critical thinking and caring attributes of students
4. Nurse educators should reinforce the nursing values early in the programmes to assist the large proportion of candidates who do not see nursing as their first career of choice
5. Research should be undertaken to ascertain the significance of the academic achievement of any subjects that will be included as pre-requisite to nursing education
6. A provincial committee should be established to operationalize the proposed framework.

5.3 LIMITATIONS OF THE STUDY

The results of this study should be interpreted with the quantitative descriptive design. The researcher did not attempt to evaluate how the selection process is being implemented at the different colleges. Therefore the results cannot serve as an indication of the level of compliance to the admission guidelines of the Gauteng Department of Health. Further studies are required to establish the level of compliance of the selection committee to the current guidelines.

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APPENDIX 1: QUESTIONNAIRES

1.1 SURVEY QUESTIONNAIRE FOR NURSE EDUCATORS

Questionnaire No: _____ (for office use)

Instructions:

- This questionnaire consists of three main sections. It will take you a maximum of 25 minutes to complete.
- Please answer all the questions with honesty and without assistance.
- Do not write your name or personal details on the questionnaire.
- Please do not write on the column marked “**official use only**”
- I will appreciate if you could return the completed questionnaire within one week in the box provided at the Principal’ secretariat
- The return of the questionnaire will be considered as an informed consent

Section A: General Information

Please enter your answers in the space provided under the answer column

#	Questions	Answers	Office use only
1.	What is your age (in years)?		
2.	What is your gender?	Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/>	
3.	What is your highest level of education (e.g. diploma, BCur, ect)		
4.	Have you ever participated in the selection process of the Basic Diploma Nursing students?	Yes <input type="checkbox"/> (if yes, go to item 5) No <input type="checkbox"/> (if no, go to item 6)	
5.	<i>Only if you answered YES in item 4</i> If yes, in which capacity have you participated (tick the most appropriate answer):	5.1 Advisory capacity 5.2 Part of the interview/selection panel 5.3 Final decision-making team 5.4 Other (specify) _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.	<i>Only if you answered NO in item 4</i> If no, in which capacity would you like to participate if given the opportunity? (tick the most appropriate answer):	6.1. Advisory capacity 6.2. Part of the interview/selection panel 6.3. Final decision-making team 6.4. Other (specify) _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Section B: Importance and relevance of the current selection criteria and processes

Note: Answer by placing a cross (x) under the importance and relevance of each statement

#	Questions	Answers				Official use only
		Important		Relevant		
		Yes	No	Yes	NO	
Q1.1	Do you think that the following minimum general requirements are important and relevant to select best candidate for basic nursing diploma programme in Gauteng:					
1.	A minimum Point Score of 25 in Grade 12 or M Score of 15 based on Grade 12 or Matric examination results					
2.	English proficiency with a minimum score of 4 in Grade 12 or symbol D (Higher Grade) or C (Standard Grade) in Matric					
3.	Life Science with a minimum score of 4 in Grade 12 or Biology with symbol D (Higher Grade) or C (Standard Grade)					
4.	Age limit of 45 years for internal applicants and 35 years for external applicants					
Q1.2	Do you think that the following requirements are important and relevant to select best internal candidate for basic nursing diploma programme in Gauteng:					
5.	Must be a South African citizen					
6.	Must complete the probation period					
7.	Must be granted study leave					
8.	Must have good absenteeism profile					
Q1.3	Do you think that the following processes are important and relevant to select best candidate for basic nursing diploma programme in Gauteng					
9.	Recruitment of candidates irrespective of the nursing background (external candidate)					
10.	Recruitment of candidate with nursing background (internal candidates)					
11.	Psychometric Test					
12.	Pre-selection interview					
13.	Medical surveillance					

Q2.1 What changes do you want to see in the current selection criteria and processes at your institution?

If yes, list at least three problems you have experienced?

Q2.2. Please, provide the reasons for each suggested change

Section C: Changes needed in the admission criteria and processes in general

#	Questions	Answers				<i>Official use only</i>
		Important		Relevant		
		Yes	No	Yes	NO	
Q1.	What do you think of the importance and relevance of introducing the following assessments into the selection process of basic nursing diploma programme in Gauteng:					
1.1	Assessment of critical thinking ability					
1.2	Assessment of the caring attributes					

Thank you

1.2 SURVEY QUESTIONNAIRE FOR NURSING STUDENTS

Questionnaire No: _____ (for office use)

Instructions:

- This questionnaire consists of three main sections. It will take you a maximum of 25 minutes to complete.
- Please answer all the questions with honesty and without assistance.
- Do not write your name or personal details on the questionnaire.
- Please do not write on the column marked “**official use only**”
- I will appreciate if you could return the completed questionnaire within one week in the box provided at the Students Affairs Office.
- The return of the questionnaire will be considered as an informed consent

Section A: General Information

Please enter your answers in the space provided under the answer column

#	Questions	Answers	Office use only
7.	What is your age (in years)?		
8.	What is your gender?	Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/>	
9.	What is your current level of study? (E.g. first year, third year, etc.)		
10.	Is this your first post Matric study?	Yes <input type="checkbox"/> (if yes, go to item 5) No <input type="checkbox"/> (if no, go to item 6)	
11.	<i>What post Matric qualification do you have?</i>		
12.	<i>Was nursing your first choice after Matric?</i>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
13.	Is there any nurse or healthcare professional in your family?	Yes <input type="checkbox"/> No <input type="checkbox"/>	

Section B: Importance and relevance of the current selection criteria and processes

Note: Answer by placing a cross (x) under the importance and relevance of each statement

#	Questions	Answers				Official use only
		Important		Relevant		
		Yes	No	Yes	NO	
Q1.1	Do you think that the following minimum general requirements are important and relevant to select best candidate for basic nursing diploma programme in Gauteng:					
1.	A minimum Point Score of 25 in Grade 12 or M Score of 15 based on Grade 12 or Matric examination results					
2.	English proficiency with a minimum score of 4 in Grade 12 or symbol D (Higher Grade) or C (Standard Grade) in Matric					
3.	Life Science with a minimum score of 4 in Grade 12 or Biology with symbol D (Higher Grade) or C (Standard Grade)					
4.	Age limit of 45 years for internal applicants and 35 years for external applicants					
Q1.2	Do you think that the following requirements are important and relevant to select best internal candidate for basic nursing diploma programme in Gauteng:					
5.	Must be a South African citizen					
6.	Must complete the probation period					
7.	Must be granted study leave					
8.	Must have good absenteeism profile					
Q1.3	Do you think that the following processes are important and relevant to select best candidate for basic nursing diploma programme in Gauteng					
9.	Recruitment of candidates irrespective of the nursing background (external candidate)					
10.	Recruitment of candidate with nursing background (internal candidates)					
11.	Psychometric Test					
12.	Pre-selection interview					
13.	Medical surveillance					

Q2.1 What changes do you want to see in the current selection criteria and processes at your institution?

If yes, list at least three problems you have experienced?

Q2.2. Please, provide the reasons for each suggested change

Section C: Changes needed in the admission criteria and processes in general

#	Questions	Answers				<i>Official use only</i>
		Important		Relevant		
		Yes	No	Yes	NO	
Q1.	What do you think of the importance and relevance of introducing the following assessments into the selection process of basic nursing diploma programme in Gauteng:					
1.1	Assessment of critical thinking ability					
1.2	Assessment of the caring attributes					

Thank you

APPENDIX 2: PARTICIPANT INFORMATION FORM

Research Title: An analysis of the selection criteria and processes into Basic Nursing Diploma Programme in the Gauteng province, South Africa

What is the research about?

This is a research being conducted by **Lerato Penelope Duiker**, a Master student at the University of South Africa. You are invited to participate in this research on your capacity as a nurse educator/nursing student at a public nursing college in Gauteng Province. The aim of this study was to analyse the selection criteria and processes followed by nursing colleges in the Gauteng Province to admit students into Basic Nursing Diploma Programme with the view of proposing selection criteria and processes that would secure the admission of the best candidates to Basic Nursing Diploma Programme in public nursing colleges in Gauteng Province.

This research has been approved by the Higher Degree Research Committee and Ethics Committee of the Department of Health Studies, University of South Africa. The College Management has granted permission to collect data.

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

You are asked to participate in the study by completing the attached questionnaire, based on your personal views as a nurse educator/nursing student at one of the public nursing college in Gauteng Province.

Would my participation in this study be kept confidential?

The information you will share with the researcher will be kept confidential as much as possible. Your name or address is not required. The completed questionnaire will be locked away by the researcher for a period of three years. No individual names or identity will be used in the report. Should an article be written about this research project, your identity will be protected to the maximum extent possible.

What are the risks of this research?

There are no known risks associated with your participation in this research.

What are the benefits of this research?

While your participation may have no readily available benefits to you and your institution now, the findings of the study may influence the future of the selection criteria and processes into Basic Nursing Diploma Programme at public nursing colleges in Gauteng.

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

Your participation in this research is completely voluntary. You may choose not to take part in the research. You may choose to withdraw your participation by not returning the completed questionnaire and you will not be penalized or lose any benefits which you may otherwise qualify for.

What if I have questions?

Should you have any concern regarding the study, please contact Prof M Ganga-Limando (Supervisor) at: Email: gangam@unisa.ac.za , Tel:+27124294131 during office hours.

Thank you for your participation.

APPENDIX 3: PARTICIPANT CONSENT FORM

Title of the study: An analysis of the selection criteria and processes into
Basic Nursing Diploma Programme in the Gauteng
province, South Africa

I voluntarily consent to participate in
the above mentioned research project.

The background, purpose, risks and benefits of the study have been explained to me. I
have received an information sheet and understand the contents thereof. I also
understand that I may choose not to complete the questionnaire without prejudice. I
understand that my participation in the study will be acknowledged, although my
identity and the identity of the college will be withheld.

I understand that my participation in the study is voluntary.

.....
Participants' signature

.....
Date

.....
Witness

.....
Date

APPENDIX 4: ETHICAL CLEARANCE

APPENDIX 5: REQUEST FOR PERMISSION

**UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE**

HS HDC/291/2013

Date: 10 December 2013 Student No: 3166-375-3
Project Title: An analysis of the admission process and criteria into basic nursing diploma programmes in the Gauteng Province.
Researcher: Lerato Penelope Duiker
Degree: MA in Nursing Science Code: MPCHS94
Supervisor: Dr JC Lubbe
Qualification: PhD
Joint Supervisor: -

DECISION OF COMMITTEE

Approved Conditionally Approved



**Prof L Roets
CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE**



**Prof MM Moleki
ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES**

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES

MEMO

To:

Mrs LS Madiseng
Post-graduate Studies
Eskia Mphahlele Building
Sunnyside

From:

Prof GB Thupayagale-Tshweneagae
Department of Health Studies
X2195

9 July 2016

STUDENT: Miss LP Duiker

STUDENT NUMBER: 3166-375-3

CHANGE OF TITLE AND SUPERVISOR

OLD TITLE: Perceptions of nurse educators and professional nurses in the clinical areas regarding criteria used to select students for training.

NEW TITLE: An analysis of the admission process and criteria into basic nursing diploma programmes in the Gauteng Province.

Previous Supervisor: Dr JC Lubbe (Personnel no 90059530)
E-mail: lubbe.jc1@unisa.ac.za

New Supervisor: Dr M Ganga-Limando (Personnel no 90091310)
E-mail: gangam@unisa.ac.za

Prof GB Thupayagale-Tshweneagae
COORDINATOR: DEPARTMENT OF HEALTH STUDIES

Approved by:

Prof MPJ Madise
Manager: Office of Graduate Studies
College of Human Sciences



GAUTENG PROVINCE
Health
REPUBLIC OF SOUTH AFRICA

Enquiries : Ms. N.B Mothokoa
Tel : 012 319 5717
Fax : 012 319 5742
E-mail norma.mothokoa@gmail.com
Reference Number: 8/1/7/5/2

Ms LP Duiker
SG Lourens Nursing College
Department 1

SUBJEC : Request for permission to collect data at SG Lourens Nursing College

This serves as a response to your request in undertaking the study on an analysis of the admission process and criteria into basic nursing diploma programmes in the Gauteng Province.

Permission is hereby granted for collection of data as indicated in your proposal.

Please take note of the following:

- All information and data collected should be treated as confidential and ethical considerations adhered to as stated in the proposal.
- At the end of the study kindly furnish the college with the study results.

Thank you

NB Mothokoa

11 . 08 . 2015

Date

pp
Ms MP Tjale (College Principal)

2015 . 08 . 11

Date





GAUTENG PROVINCE

REPUBLIC OF SOUTH AFRICA



CHRIS HANI BARAGWANATH NURSING COLLEGE

Private Bag X 05
Bertsham
2013

Tel: (011) 983-3000
Fax: (011) 983-3091

07.08.2015

Enquiries: Ms. N.J. Mqokozo (Acting Principal)

Chris Hani Baragwanath Nursing College

Tel No: 011 983 3069

To: Ms L. Duiker (Lecturer)

University of South Africa

RE: PERMISSION TO CONDUCT RESEARCH AT CHBNC

Dear Ms Duiker

I hereby notify you that your request to conduct a study in our College on an analysis of the selection criteria and processes into Basic Nursing Diploma Programme in the Gauteng Province, South Africa been considered, and I am granting the permission to conduct the study in our College.

May you furnish the Chris Hani Baragwanath Nursing College with the results of your study after you have finished.

Thank you

Ms N.J. Mqokozo





GAUTENG PROVINCE

HEALTH
REPUBLIC OF SOUTH AFRICA

OUTCOME OF PROVINCIAL PROTOCOL REVIEW COMMITTEE (PPRC)

Researcher's Name (Principal investigator)	Ms LP. Duiker
Organization / Institution	SG Lourens Nursing College
Research Title	Perception of nurse educators and professional nurses in the clinical areas regarding criteria used to select students training for Diploma in Nursing.
Contact number	Address: N/A Contact no: 012 319 5748 Cell: 082 322 5280 Email: leratoduiker@yahoo.com
Protocol number	
Date submitted	23/07/2015
Date reviewed	July 2015
Outcome	APPROVED
Date resubmitted	N/A
Date of second review	N/A
Final outcome	APPROVED

It is a pleasure to inform that the Gauteng Health Department has approved your research on "Protocol Title: Perception of nurse educators and professional nurses in the clinical areas regarding criteria used to select students training for Diploma in Nursing.

The Provincial Protocol Review Committee kindly requests that you to submit a report after completion of your study and present your findings to the Gauteng Health Department.

Recommended

Dr B Ikalafeng (on behalf of PPRC)

Date 05-08-2015

Approves / not approves

Dr R Lebethe

Acting DDG: Hospital Services

Date 25-08-2015



GAUTENG PROVINCE

REPUBLIC OF SOUTH AFRICA

ENQUIRIES

Mrs. N. NTSELE

Tel. (011) 644 8903

nompie.ntsele@gauteng.gov.za

ATTENTION:

Ms. L. Duiker

18. August 2015

RE: PERMISSION TO CONDUCT A RESEARCH PROJECT AT ANN LATSKY NURSING COLLEGE

RESEARCH TOPIC: AN ANALYSIS OF SELECTION CRITERIA AND PROCESSES INTO BASIC NURSING DIPLOMA PROGRAMME IN THE GAUTENG PROVINCE, SOUTH AFRICA

Dear Ms. L. Duiker

Your e - mail date 06 August 2015 refers. Thank you for submitting the research proposal to the Principal of Ann LATSKY Nursing College. Permission has been granted to conduct a research project at Ann Latsky Nursing College. However the following conditions of approval apply:

- You will be required to present the research proposal, the research findings and the recommendations of the project at Ann Latsky Nursing College during the nursing college's research day.
- You are required to donate a copy of the research project to Ann Katsky Nursing College Library
- Indicate in which journal you will publish the research project

Kind Regards

Mrs. R. Ramahlafi

College Principal

