

**PROFESSIONAL NURSES' PERCEPTIONS OF NEWLY  
QUALIFIED PROFESSIONAL NURSES COMPETENCY AND  
FACTORS INFLUENCING COMPETENCY**

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## **ABSTRACT**

In our constantly changing healthcare system and with large numbers of staff shortages in hospitals, newly qualified professional nurses are expected to be competent and work unsupervised in leadership capacities soon after they have completed their nursing programs. The study was aimed at determining the perceptions of professional nurses of newly qualified professional nurses' competency as well as factors that influence competency. A quantitative approach using a descriptive survey design was employed, using 34 experienced professional nurses working in selected private hospitals in the Western Cape. Data was collected by means of a peer evaluation questionnaire, namely the Competency Inventory for Registered nurses. Data was analyzed, using IBM SPSS 19 with the assistance of a statistician. The results of the 55-item Competency Inventory for Registered Nurses indicate that newly qualified nurses were perceived as highly competent in clinical care, leadership, interpersonal relation, legal/ethical and professional development. Newly qualified nurses were perceived as low in competency in teaching/coaching, critical thinking and research aptitude. All the factors identified using literature, were perceived as having an influence on competency. Recommendations were made to the institutions to assist newly qualified nurses in competence development.

## **KEYWORDS**

Competence, Competency, Clinical competence, Perception, Newly qualified nurses, Professional nurses, Private hospital

## **DECLARATION:**

I declare that *Professional Nurses Perceptions of Newly Qualified Nurses Competency and Factors Influencing Competency* is my own work, that it has not been submitted for any degree or examination in any other University and that all the sources I have used or quoted have been indicated and acknowledge by complete references.

Signed: \_\_\_\_\_

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

NASIEBA HANSEN – SALIE

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Competency Inventory for Registered Nurses (Liu et al. 2007  
adapted)

## **ABBREVIATIONS**

HIV/AIDS	Human Immuno Deficiency Virus/Acquired Immune Deficiency Syndrome
(R.)	Regulation
SANC	South African Nursing Council
ICN	International Council for Nurses
COPA	Competency Outcomes and Assessment
UWC	University of the Western Cape

# CHAPTER 1

## ORIENTATION TO THE STUDY

### 1.1 Introduction

In our constant ever changing healthcare system and with large numbers of staff shortages in hospitals, newly qualified professional nurses are expected to be competent and work unsupervised in leadership capacities soon after they have completed their nursing programs. Scott, Engelke and Swanson (2008) concurs that new graduate nurses enter a work environment that is very busy with minimal resources, high patient numbers and staff shortages. The South African experience is no different. The impact of HIV/AIDS amongst other, on health care delivery has resulted in the expectation that the newly qualified professional nurse be competent in a wide range of skills namely administrative, clinical, communication, critical thinking to name but a few. Furthermore, competence of professional nurses is important for ensuring quality and cost effective health care to the population of South Africa (Meretoja, Eriksson & Leino-Kilpi, 2002). Communities also expect that the care they receive is safe and carried out by competent nurses (Watkins, 2000).

### 1.2 Background and Rationale for the study

Education and training for nurses working in private hospitals in South Africa is conducted at private nursing colleges. The nursing colleges are affiliated to the private hospitals which are under the auspices of the Further Education and Training Sector. In the Western Cape a group of private hospitals, namely Life Healthcare, established Life College of Learning in 1999. This was done to meet the demands of the nursing shortage. Nurse education and training at Life College was for staff working within the Life Healthcare group. Due to the demand for nurses, the education and training was extended to the general population in 2000. The private hospitals offer sponsorships to these students to complete their education and training and in return they have to work back the amount of years studied.

According to the South African Nursing Council (SANC), nurse education and training programmes include Regulation (R.) 425, Regulation (R.) 683 and Regulation (R.) 2175 amongst other (SANC, 1985; SANC, 1989; SANC, 1993). These colleges offer the one year enrolled nurses' course R.2175 (SANC, 1993) and the two year bridging course R.683 (SANC, 1989). An enrolled nurse is a person who has completed and qualified in the 2 year course leading to enrolment as a nurse. Upon completion of R.683 (SANC, 1989) the enrolled nurse qualifies as a professional nurse.

The clinical requirement for R.683 is that the student will acquire a minimum of 2000 clinical hours (SANC, 1989. Par7.2). These hours are divided into various disciplines in general nursing e.g. medical, surgical, theatre, trauma, pediatrics and community. SANC does not specify the amount of hours per discipline. The students conduct most of their clinical hours in Life Healthcare hospitals. Community clinical hours are done at government and private clinics which are accredited by SANC.

Nurses having completed the bridging course are not required to do community service. However newly qualified nurses having completed R.425 is legislated to do one year community service (R.765; SANC, 2007). These nurses have the opportunity of being mentored and supervised by experienced professional nurses during the community service year. Newly qualified nurses who complete their studies according to R683 (SANC, 1989) do not get the opportunity to gain that additional year's experience with the necessary guidance from experienced professional nurses. It is within this year that there seems to be questions about the competency in rendering patient care. Anecdotal evidence obtained from experienced professional nurses has indicated that some newly qualified nurses' lack certain basic required competencies. These competencies include for example lack of knowledge regarding normal blood pressure values, lack critical thinking skills and inability to integrate theory and practice. The integration of theory and practice is important because it assists newly qualified nurses in attaining "critical knowledge, rational autonomy and professional self-determination" (Fealy, 1999:76) A study conducted by Morolong and Chabeli (2005) in South Africa found that newly qualified nurses lacked critical thinking skills in their rendering of nursing care. They had very little knowledge of nursing diagnosis and were not

competent in the skills of nursing diagnosis. They also lacked basic knowledge, skills, attitudes and values of the nursing process.

Several researchers (Moeti, Van Niekerk & Van Velden, 2004; Morolong & Chabeli, 2005) reported issues relating to nurses competencies in other clinical settings. The issues might be related to unrealistic expectations about the competence or ignorance, of what could be reasonably expected of newly qualified nurses (Roberts, 2009). In a study done in South Africa it was found that new graduates are expected to perform duties beyond their scope of practice. There were also inconsistencies in what they experienced in practice as to what they learned in theory. They had theoretical knowledge but they were not competent in basic nursing skills thus were seen as not being 'fit for practice' (Moeti, et al 2004; Clark & Holmes, 2006:1211). These authors identified that when they are registered as professional nurses, they are unprepared in terms of knowledge, skill and expertise for practice without supervision.

### **1.3 Research problem**

Competency in nursing is a crucial aspect in the rendering of quality nursing care. On completion of the nursing program the student nurses have met the minimum requirements for registration as professional nurse in both the theory and clinical components. They would also have met the South African Nursing Council required amount of hours in the clinical setting. However despite these evaluations of outcomes, literature and observations seem to indicate that other professional nurses perceive newly qualified professional nurses not to be competent in certain clinical areas.

This research wants to determine what perceptions professional nurses in private hospitals have of the newly qualified professional nurses' competency and what factors influence competency.

### **1.4 Research questions**

What are professional nurses' perception of newly qualified nurses' competency and what factors are perceived to influence competency?

## **1.5 Significance**

To maintain and improve high quality nursing care, it is important that newly qualified professional nurses are competent in their provision of nursing care within their scope of practice. By determining the perception of competency of newly qualified professional nurses', professional nurses may develop an understanding of what can be reasonably expected from newly qualified professional nurses when they enter the profession. Measures may be implemented that will assist their transition from student to qualified professional nurse to be a positive experience. This study may provide insight with regard to improvement of the integration of theory and practice in nursing education.

By identifying factors that influence competency, strategies could be adopted by institutions to improve competence development.

## **1.6 Goal of the research**

The goal of this research is to determine the perceptions of professional nurses of newly qualified professional nurses' competency as well as factors that influence competency.

## **1.7 Objectives**

The objectives are to determine:

- Professional nurses' perceptions of newly qualified professional nurse's competency in clinical care, leadership, interpersonal relation, legal/ethical practice, professional development, teaching-coaching, critical thinking and research aptitude.
- Factors that influence competency.

## **1.8 Definitions**

The following terms as defined below are used for the purpose of this study:

### **Newly Qualified Nurse**

A person who is recently qualified and competent to independently practice comprehensive nursing in a manner and to the level prescribed and who is capable of assuming responsibility and accountability for such practice (Nursing Act no. 33 of 2005).

For the purposes of this study a newly qualified nurse is a person who has qualified as a professional nurse, following the R.683 (SANC, 1989) and is rendering direct patient care at selected Life Healthcare hospitals within the first year post qualification.

### **Professional Nurse**

A person who has become proficient and skillful over time and is qualified and competent to independently practice comprehensive nursing in a manner and to the level prescribed and who is capable of assuming responsibility and accountability for such practice. (Benner, 2001; Nursing Act no. 33 of 2005)

For the purpose of this study an experience professional nurse is a person who has been qualified 5 years or more and is employed in a fulltime or sessional position at the selected Life Healthcare hospitals where the study is conducted.

### **Private Hospital**

A hospital similar to a group hospital, operated for profit, except that it is controlled by a single practitioner or by the practitioner and the associates in his or her office (Stedman's Medical Dictionary 2006).

For the purpose of this study a private hospital is hospital where patients are paying for health care services administered by the Life Healthcare group within the Western Cape.

### **Perception**

Perception is defined as an action by which the mind refers its sensations to external object as cause (Oxford Dictionary 2000). This study wants to determine the professional nurses' perceptions of newly qualified nurses' competency. Perception for the purpose of this study refers to how the experienced professional nurse perceives newly qualified nurses competency.

## **1.9 Research Design and Methodology**

### **1.9.1 Research Approach and Design**

The research employed a quantitative approach as data was described numerically. A descriptive survey design was used in this study as it measured perceptions of



competency of newly qualified professional nurses and the factors which influence competency by means of descriptive statistics using a structured questionnaire. A descriptive design allows for more information about characteristics within a specific field of study and provides an image of a situation as it naturally happens (Burns and Grove 2003).

### **1.9.2 Data collection instrument**

In this study, data was collected using an existing structured questionnaire (See Section B: “competencies” of the questionnaire in Annexure C). The Competency Inventory for Registered Nurses is a 55-item peer evaluation instrument that was formulated using the International Council for Nurses (ICN) framework of competencies for the generalist nurse as a guideline (Liu, Kunaiktikul, Senaratana, Tonmukayakul and Eriksen 2007). Permission was obtained from the author to use the instrument for this study (Annexure A). There are two more sections to the questionnaire namely biographical data and factors influencing competency, which the researcher specifically developed for this study (see section 3.3).

### **1.10 Data Analysis**

The questionnaires were numbered and coded to facilitate data capturing and auditing of captured data. With the help of a statistician the SPSS program was used to calculate basic descriptive statistics and these were presented in tables and graphs (see chapter 4).

### **1.11 Pilot Study**

According to Burns and Grove (2003) a pilot study are done to determine whether there are any problems with the research design of the instrument and to examine the reliability and validity of the research instruments. A pilot study was conducted with 10 volunteers who fit the inclusion criteria of the sample and their feedback was used to adapt the questionnaire.

### **1.12 Ethical Considerations**

According to Brink (2001) the researcher must be ethical in conducting research, be competent in managing resources, acknowledge fairly those who have given guidance and assistance, communicate results accurately and take into consideration the consequences of the research for society. In addition the researcher has an ethical responsibility to recognize and protect the rights of the individuals who participate in the study (Burns and Grove, 2009). The ethical considerations observed in this study are discussed in chapter 3.

### **1.13 Limitations of the study**

Due to the fact that this is descriptive study generalization will only be possible for private hospitals included in the study. The response rate of the participants in the private hospitals may affect the outcome of the results of the study. The response rate was 88% (n = 30).

### **1.14 Chapter Outline**

Chapter 1 introduces the study and discusses the rationale and background, purpose, objectives and significance of the study, defines key terms, research design, methodology and ethical considerations.

Chapter 2 discusses the literature undertaken on competency of newly qualified nurses and defines concepts such as competence, clinical competence and competency with reference to the ICN competency framework.

Chapter 3 discusses the research design and methodology, including the selection and modification of the data-collection instrument, method of distribution and collecting of the questionnaires.

Chapter 4 presents the discussion of the data analysis and research findings.

In Chapter 5 concludes the study, briefly discusses the limitations and make recommendations for practice and further research.

## **1.15 Conclusion**

This chapter outlines the rationale for, background to and the purpose, objectives and significance of the study. The researcher defined key terms, briefly described the research design and methodology and ethical considerations.

Chapter 2 discusses the literature review on the competency of newly qualified nurses and factors influencing competency.

# **CHAPTER 2**

## **LITERATURE REVIEW**

### **2.1 Introduction**

The healthcare system and nursing education system has undergone major changes over the past few years and the competencies of newly qualified professional nurses within this system has been questioned by a number of researchers (Moeti et al (2004); Morolong & Chabeli 2005). How competencies are being measured and whether the tools used are reliable and accurate was also questioned by some researchers. Meretoja, Isoaho and Leino-Kilpi (2004) found in their review that definitions for the categories of competency differ and that there was no reliable and accurate measuring instrument for competency of nurses in Finland who are practicing in the profession. A search for literature using different books and journals, found on databases such as Scopus, Science Direct, NEXUS, CINAHL and MEDLINE, and using keywords such as “competence”, “clinical competence”, “Perceptions of competence” and “factors influencing competency” contained many of the articles from which information was obtained for this study. This chapter will include definitions of the concepts of competence, competency and clinical competence. Critical elements involved in understanding competence are highlighted and the developmental nature of competency and proficiency will be noted. The Competency Outcomes and Assessment (COPA) model (1999) and the Framework of Competencies of the International Council of Nurses (ICN) (2003) that were used as conceptual frameworks for the study, will be discussed.

### **2.2 Concept clarification**

In this section the concepts competence, competency and clinical competence will be defined and clarified.

### **2.2.1 Introduction**

In South Africa as in the UK, preparation of nursing students was dependent on apprenticeships which were developed by Florence Nightingale in the late 19th Century (Watkins 2000). Preparing nurses meant that they must have had sufficient theoretical knowledge to deliver patient care and included the assessment of personal attributes such as their moral character and how well they interact with patients and colleagues (Bradshaw 2000). Training nurses in this way however changed over the years. It was found that it may be beneficial for nurses to be trained in higher education institutions. In this way nurses would be taught to be more critical and analytical in their practice of nursing and at the same time practice can become more research- based (Watkins 2000). However, Chapman (1999:130) observed that the transfer of responsibility for nurse education to higher education institutions had created a “complex environment with contentious issues” For example, the health care sector, as an employer, wants newly qualified nurses who can enter the work environment without much “need for further training, supervision or orientation”(Chapman 1999:130). However, training in this regard may be perceived as preparing nurses only for a particular set of tasks to be performed in a given situation (McAllister 1998). According to Bradshaw (1997:348) free professional reign was allowed in defining nursing competence and there is disagreement on how “nurses can judge what they know, what they should know and what they do not know.” Watson (2002) observed that competence is a poorly defined concept and that its measurement is also a concern. Similarly Cowan, Norman and Coopamah (2007) assert that there is confusion over the distinction between competence and competency. Woodruffe (1993) indicates that there could be a blurring of distinction between the two and defined competence as the aspect of a job that an individual could perform, while competency is the behaviour underpinning such performance. McMullan, Endacott, Gray, Jasper, Carolyn, Scholes and Webb (2003) note that the terms competence, competency, capability and performance are still used interchangeably and suggested that competence and competencies are job-related, are descriptive of action, behaviour or outcome of performance. In the following section concepts related to competency are clarified.

### **2.2.2 Competence**

The Oxford Dictionary (2000) defines competence “as having achieved the required ability, knowledge or authority.” Woodruffe (1993) defines competence as the aspect of a job that an individual can perform. “Competence is the ability to deliver a specified professional service. This refers to the total role functioning of the professional and incorporates a number of units of competence” (Uys 2003:1).

### **2.2.3 Competency**

Searle and Pera (1995) clarifies competency as the dimensions of cognitive, affective and psychomotor abilities that are needed to perform specific activities. Uys (2003:1) notes that competency is a unit of competence which “describes the outcome expectations of a particular work role and acts as a benchmark against which individual performance is judged.” Verma, Paterson and Medves (2006) assert that competency is a concept that is dynamic and consisting of many aspects that is more than knowledge and includes the understanding of knowledge, clinical skills, interpersonal skills, problem solving, clinical judgement and technical skills.

### **2.2.4 Clinical competence**

Oerman (1990) as cited in Baramée and Blegen (2003), states that clinical competence implies an integration of cognitive and affective dimensions, i.e. knowing the scientific principles underlying performances of skills and reflecting the nurses’ value and concern for the client while performing the procedures. Clinical competence can be seen as the ability of newly qualified nurses to integrate what they have learned holistically in theory into practice and in this manner render quality patient care.

For the purpose of this research, the description of the International Council of Nurses (ICN) of the concepts of competence and clinical competence, as cited by Alexander and Runciman, (2003) was adopted. Competence is said to be the effective application of knowledge, skill and clinical judgement in the performance of nursing care activities.

Based on these definitions the assumption can be made that newly qualified professional nurses have to be competent as they have qualified in their respective

nursing programs. Carlson, Kotze and Van Rooyen (2005) investigated experiences of final year nursing students in their preparedness to become registered nurses in South Africa and indicated in their study that these students did not feel confident to fulfill their future role as professional nurses. Students feel overloaded with theory in college and don't feel adequately prepared and lack confidence in practice. This is exacerbated by practitioners and employers who are still questioning what teachers are teaching and expecting of students and why newly qualified professional nurses are not as competent as they need to be in the current work environments (Lenburg 1999). Cognizance must be taken however that it is a complete new role that newly qualified nurses are stepping into, thus the question arises of what can be realistically expected of them. Another aspect that needs to be considered is whether there is an understanding of what competence entails. There are critical elements involved in understanding competence (Uys 2003).

### **2.3 Critical elements in understanding competence**

Uys (2003) highlights that competence is a holistic concept and there are critical elements to be considered in understanding competence. The critical elements as identified by Uys (2003) are presented as it seems to be a good summary of the abovementioned reflections on competency.

#### **Focus is on performance**

Performance includes knowledge, understanding, skills and attitudes. Competence thus demands that the nurse is able to integrate all these elements and apply it appropriately. Skill without knowledge, understanding and the foundation of the appropriate attitude is not competent practice.

#### **Competencies are broad and occupation based, not narrow and job based.**

A job-based approach is linked to the present and a specific setting, such as writing a job description for a nursing position in a specific unit. An occupation-based approach is for all nurses of a specific category or level in a whole service, region or country.

**Competence makes provision for the inevitability of change.**

The ability to do the job at this moment does not mean that the person has the cognitive and learning skills to continue to learn and adapt, so that she/he will still be able to do the job in a year's time.

**Competence should focus on output, not input.**

When one defines competence in terms of skills, knowledge and attitudes (explicitly or implied), the focus is on input. Even a focus on specific tasks is seen as input-focused. It is more useful to describe competence in terms of holistic work roles or elements of roles.

**Competence is something that is inferred from performance, and not directly observed.**

What is usually observed is only a segment of a person's functioning in the role. The assessment of competence is therefore dependent on the reliability and validity of the procedures used, and usually on more than one measure. However, the integrated approach to assessment of competence focuses on holistic assessment, as far as possible in the real situation.

## **2.4 Competency and work roles**

The model of Mitchell (1987) relates competencies to work roles and then distinguish four components of work competency.

- (a) Task or technical competencies, relate to the core activity of the role. They are routine, sequential, procedural and predictable and have tangible outcomes.
- (b) Contingency management competencies, which involve managing breakdowns in routines, procedures and sequences.
- (c) Task management competencies, which are concerned with the management of tasks to achieve overall job function has to do with prioritizing, planning and adapting.
- (d) Role environment competencies, which enable the job holder to manage the natural constraints under which she/he works, the working



relationships, the standards applied to the job, and the organization in which the job is performed.

## 2.5 Competence and proficiency – a developmental process

Benner (2001) indicates that clinical competence is a developmental process and adapted the Skill Acquisition and Skill Developmental Model to clinical nursing practice by Dreyfuss (1984). The model is situational and describes five levels of skill acquisition and development: (1) novice, (2) advanced beginner, (3) competent, (4) proficient, and (5) expert.

The figure 2.1 summarises the skill levels.

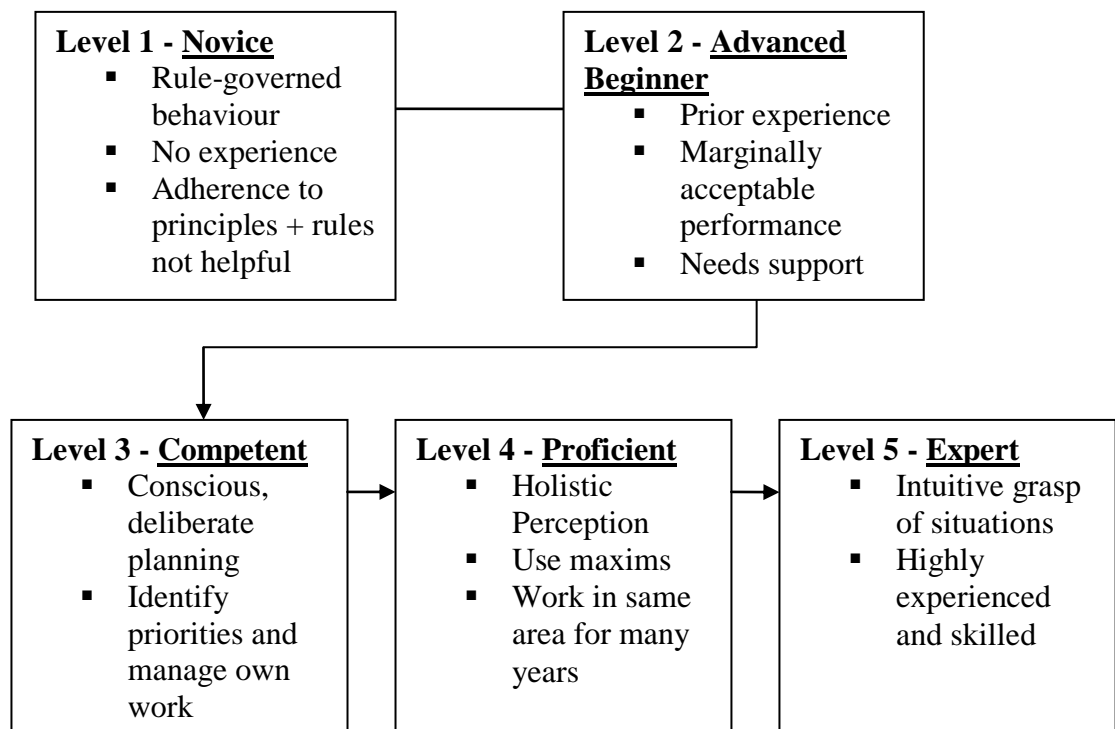


Figure 2.1: Skills Acquisition and Skill Developmental Model of Dreyfuss (1984)  
Adapted from Quinn 1997:181 -182

The following discussion summarizes the implications of this model:

### **Novice**

A novice does not have any experience in nursing and includes students as well as experienced nurses moving into unfamiliar work areas.

### **Advanced beginner level**

Through their training and education and as she/he is exposed to clinical situations with real life patients, an acceptable level of care is given.

### **Competent level**

At this level, a professional nurse plans her care in a conscious, deliberate manner. He/ she are able to discern what is most important and in this way she prioritizes and manages her work. Benner (2001) further states that this skill is acquired within two to three years after a nurse has been in the same position or job.

### **Proficient level**

Proficiency is then the stage when the nurse effectively perceives the clinical situation in a holistic manner. This means that he/she is now skillful, competent, and masterful at assessing situations in the clinical field and managing it effectively without having to think about it.

### **Expert level**

A highly experienced and skilled nurse who, based on significant experiential learning, possesses an intuitive grasp of clinical situations.

It should be noted that criticisms has been raised with regard to certain aspects of Benner's theoretical perspective. Field (2004) states that Benner's list of definitions of practical nursing knowledge did not include psychomotor skills and her approach to facilitate the development of these was not very clear suggesting that the student would already have knowledge of principles and rules as tools needed to learn from experience. Weaknesses of Benner's theoretical perspective, according to Redfern, Norman, Calman, Watson and Murrells (2002) are that it relies on intuition which cannot be explained in scientific terms, its general lack of scientific trustworthiness and its alleged atheoretical base. The process of separating learning from assessment of students' competence might also be more difficult with Benner's approach, established as it is in actual nursing practice. Sharp et al (1995) maintain that Benner's approach causes difficulty for teachers in nursing in that the knowledge-based curriculum cannot easily be assessed with a skills-based competence assessment method. Quinn (1997) asserts that Benner

only places competence midway on her stages of nursing skill acquisition and that she views competence as a fairly basic level of performance which equates the lay concept that competence is perceived as synonymous with safety. According to Quinn (1997) the nurse may practice without jeopardizing the patient's safety, but she might not possess the necessary interpersonal skills needed to practice competently.

There is however widespread support for the notion that acquiring clinical competence is a process and Del Bueno (1990) reported that it took approximately eight months of clinical experience before new graduates felt confident and competent in their clinical judgments.

Clark and Holmes (2006) indicate that the level of expectation, confidence, preceptorship and opportunities to learn in practice had an impact on the newly qualified nurses' development of competence.

## **2.6 Factors influencing competency**

Literature has revealed that there are several factors that influence newly qualified professional nurses in their development of competency.

### **Experience in nursing practice**

Despite the expectation of competency of newly qualified professional nurses on completion of their programmes, it cannot be assumed that they are competent to practice independently and without supervision at this time (Clarke and Holmes 2006). Competency is developed as professional nurses gain more experience in the clinical field. Scott, Engelke and Swanson (2008) assert that experienced nurses are more competent in handling multiple priorities and larger caseloads, but new graduate nurses are often placed in at – risk areas. Benner (2001) asserts that by experience, preconceived ideas and theory are improved through continuous exposure to practical situations. Experience gained through repeated practice and observation of more experienced colleagues is regarded as invaluable for development of competency in psychomotor and critical thinking skills (Khomeiran, Kiger & Ahmadi 2006). Nurses also learn through their own experiences and this is known as primary or vicarious experiences (Arbon 2004). Primary experience involves the nurse herself, requires an interpretation and reaction and has an immediate effect. Secondary experience is gained through

videos, scenarios and by listening to more experienced staff or observing their actions. Wangenstein, Johansson and Nordstrom (2008) found that receiving feedback was described as being very important in gaining experience. By not giving feedback the nurse might continue to do procedures in the wrong way and it will impact negatively on her/his competence.

### **Learning opportunities**

Learning opportunities are regarded as vital for developing clinical competency. In challenging, busy work environments newly qualified professional nurses are exposed to unfamiliar situations in the clinical field which may require them to make decisions and manage it to the best of their ability. These learning opportunities that challenge their abilities and allow them to reflect on their strengths and weakness will lead to improvement of their competency (Khomeiran et al. 2006). Exposing new graduates to unfamiliar situations, could negatively affect their competency development as it can lead to decreased quality and risk to patient care. Clarke and Holmes (2006) found in their study that the pressures of work in busy areas often meant that there was no time to integrate and consolidate skills and knowledge and limited possibilities for reflection during the working day.

### **Personal characteristics**

According to Khomeiran et al. (2006) personal characteristics such as nurses' eagerness to learn new things, to make a concerted effort to apply them in the correct manner and being open to criticism have a positive influence on competency. Goh and Watt (2003) reported that participants in their study felt that positive feedback rather than negative or no feedback, improved nurses' confidence and had a positive effect on their competence.

### **Environment**

The environment is regarded as important in developing technical competencies in relation to technological improvements. It requires that staff must constantly be up to date and do their best to become competent (Khomeiran et al. 2006). An aspect of the work environment noted by Carlisle (1999) to influence competence is insufficient time for consolidation of knowledge and skills due to frequent short

placements in areas. Nurses are not working long enough in specific specialized areas to acquire certain competencies. Situational variables within the environment can influence performance and can have a negative effect on competence development (Fitzpatrick, While and Roberts (1994). Boychuck Duchscher (2004) indicate that environmental factors at clinical level such as staff shortages, patient acuity and pressures to role expectations can negatively affect new graduates to improve their competence. Scot, Engelke and Swanson (2008), reported that placing new nurses in well-staffed units, where they will not be overwhelmed by daily workloads, will improve competence.

### **Motivation**

Motivation is intrinsic rather than extrinsic and reflects our interest in achieving a task, how important it is, whether we want to do it and if we are capable of doing it (Pugliese n/d). Patient satisfaction and the transition from student to graduate nurse, which makes them accountable, were most mentioned motivators. Pedley and Arber (1997:409) noted in their study that” participants pointed out that taking on responsibility had given them the opportunity to acquire skills of self-motivation, time management and assertiveness” Demotivators included unjustified behaviours by managers, engaging in tasks meant for lower categories and non-competitive salaries were seen as having a negative effect on competence development (Khomeiran et al. 2006).

### **Confidence**

Confidence is defined by Lathlean and Corner (1991) as ‘a sense of security which is soundly-based on the nurses’ awareness of her own capability, values and rights’. The assumption of Clarke and Holmes (2006) that newly qualified professional nurses are not competent to practice independently appears to reflect a lack of confidence on their behalf, but also an inability by more experienced staff to display more faith in the capabilities of these nurses due to previous experiences. This in turn affects confidence in their abilities and confidence placed in them by others. Greenwood (2000) reported that if treated considerably by senior colleagues and having their learning needs recognized and responded to, unremarkably increases the confidence of new graduate nurses. It seems as if choice, autonomy and relevance increases newly qualified nurses’ confidence and

make them more aware of and receptive to their own learning needs (Pedley and Arber 1997).

### **Expectation placed on nurses by themselves and others**

The level of expectation placed on new nurses have a negative effect on competency due to the fact that newly qualified professional nurses are “not supposed to know much” and lacking in many skills that allows them to practice independently (Clarke & Holmes 2006). These nurses are then not exposed to skills that are required to be done at their level. This has a negative impact on competence development. Mooney (2007) states that expectation placed on newly qualified graduates by ward managers, doctors and patients was found to be high and unreasonable and made them feel ill-prepared and incompetent. Newly qualified nurses place unrealistic expectations on themselves, by working twice as hard, to prove that they are capable as nurses (Kelly 1996).

### **Knowledge supporting actions**

According to Kelly (1998) new graduates are anxious about not having enough knowledge to perform competently and making mistakes. Despite being optimistic of their future role newly qualified professional nurses felt that their clinical experience as a student did not assist them in their transition and they felt unprepared (Goh and Watt 2003). It is important that newly qualified professional nurses have a sound theoretical knowledge and uses it correctly in practice as Clarke & Holmes (2006:1218) states, that knowledge must support actions. Theoretical knowledge is beneficial if applied to real needs in practice (Khomeiran et al. 2006).

### **Effective preceptorship including both support and challenge**

The need for support and guidance of newly qualified professional nurses has been noted in some studies. Mills, Francis and Bonner (2005) indicate that socialization is essential for these new nurses and preceptorship is a strategy that can assist in skills' acquisition. Ulrich (2003) suggested that preceptors have a positive influence on graduates' confidence in their abilities in their first year, but only if there is consistency and not frequent changing of preceptors. The guidance and support received by newly qualified professionals through

preceptorship was perceived as crucial in the development of competency (Clarke and Holmes 2006). Greenwood (2000) however alerts that preceptorship can add to the already increased work load in areas and can lead to resentment and hostility. This means that newly qualified graduates will be at a disadvantage as they will not get the support they need.

### **Acceptance into the ward team**

According to Clarke & Holmes (2006) newly qualified professional nurses felt that by giving them the opportunity to perform “specialist” tasks made their acceptance into the ward team so much easier. Carlisle et al. (1999) found that nurse managers’ perceptions are that new graduates had difficulty in becoming team members and fully grasping the concept of teamwork. Secatore (1997) warns that the practice of the boot camp approach to orientation, where new graduates are subjected to all manner of stressful experiences to evaluate the extent to which they have what it takes to become one of the ward team, can be damaging and impact negatively on competence development. Goh and Watt (2003) noted in their study that “assimilation anxiety” which is the need to fit in, the need to prove themselves and colleagues that they are worthy of the term good nurses, affected participants competence development.

## **2.7 The competency outcomes and performance assessment model (COPA)**

The COPA model (1999) suggests that a competency based approach requires that educators (academic or non-academic) analyze relevant current environments and needs from which they determine content and competencies to be achieved in the instructional program (Lenburg 1999). The COPA model describes an integrated outcomes-oriented system based on concepts related to creating practice competency categories, implementing interactive learning methods and key psychometric concepts that support performance assessment methods. Within the South African Outcomes-Based Education model, this framework seems to have value for research and development purposes.

The COPA model (1999) comprises of eight core competencies which collectively define practice and can be applied universally in education and practice environments. These competencies are best used at the same time in practice, but

can be adapted to fit specific settings, clients, employees and types and levels of students and practitioners. The competencies are as follows:

### **Assessment and intervention skills**

According to Quinn (1997) assessment is a term used instead of measurement when a numerical value is not involved e.g. a checklist of behaviours.

These skills involve safety and protection, assessment and monitoring and therapeutic treatments and procedures (Lenburg 1999).

### **Communication skills**

Interpersonal communication skills are fundamental in relationships with other people and are relevant to nurses and midwives who are working in close proximity with patients and their relatives (Quinn 1997). It consists of two categories, namely verbal and non-verbal communication.

Lenburg (1999) categorizes these skills into oral skills, (talking, listening, interviewing, reporting) writing skills (clinical reports, care plans, charting, memos) and computing skills (information processing, using computers).

### **Critical thinking skills**

Critical thinking is a positive activity and is needed in the process of growth and development in society or an organization and consists of the following abilities:

- a) define a problem
- b) select relevant information for problem-solving
- c) draw inferences from observed or supposed facts
- d) recognize assumptions
- e) formulate relevant hypotheses
- f) make deductions, i.e. draw conclusions from premises
- g) make interpretations from data
- h) evaluate arguments (Quinn 1997).

### **Human caring and relationship skills**

According to Lenburg (1999) this involves morality, ethics, legality, cultural respect, patient advocacy and cooperative interpersonal relationships.



**Management skills**

These are skills involved in administration, organization, coordination, planning, delegation, supervision of others, human and material resource utilization, accountability, responsibility and performance appraisals (Lenburg 1999).

**Leadership skills**

According to Lenburg (1999) leadership involves collaboration, assertiveness, risk taking, creativity, vision to formulate alternatives, planning, anticipating, supporting with evidence, professional accountability role behaviours and appearance.

**Teaching skills**

Quinn (1997) asserts that it is much more beneficial to introduce these skills to students during their initial training, as patient education is an important part of their role as nurses and they will be able to implement it throughout their training. These skills involve individuals and groups, patients, coworkers, teaching health promotion and restoration (Lenburg 1999).

**Knowledge integration skills**

According to Lenburg (1999) these include, nursing, healthcare and related disciplines, liberal art, natural and social sciences and related disciplines.

## 2.8 The framework of competency of the international council of nurses (ICN)

The International Council of Nurses (ICN) has since then presented a framework of competencies for the generalist nurse that seems to acknowledge the basic assumptions of this model (Alexander and Runciman 2003).

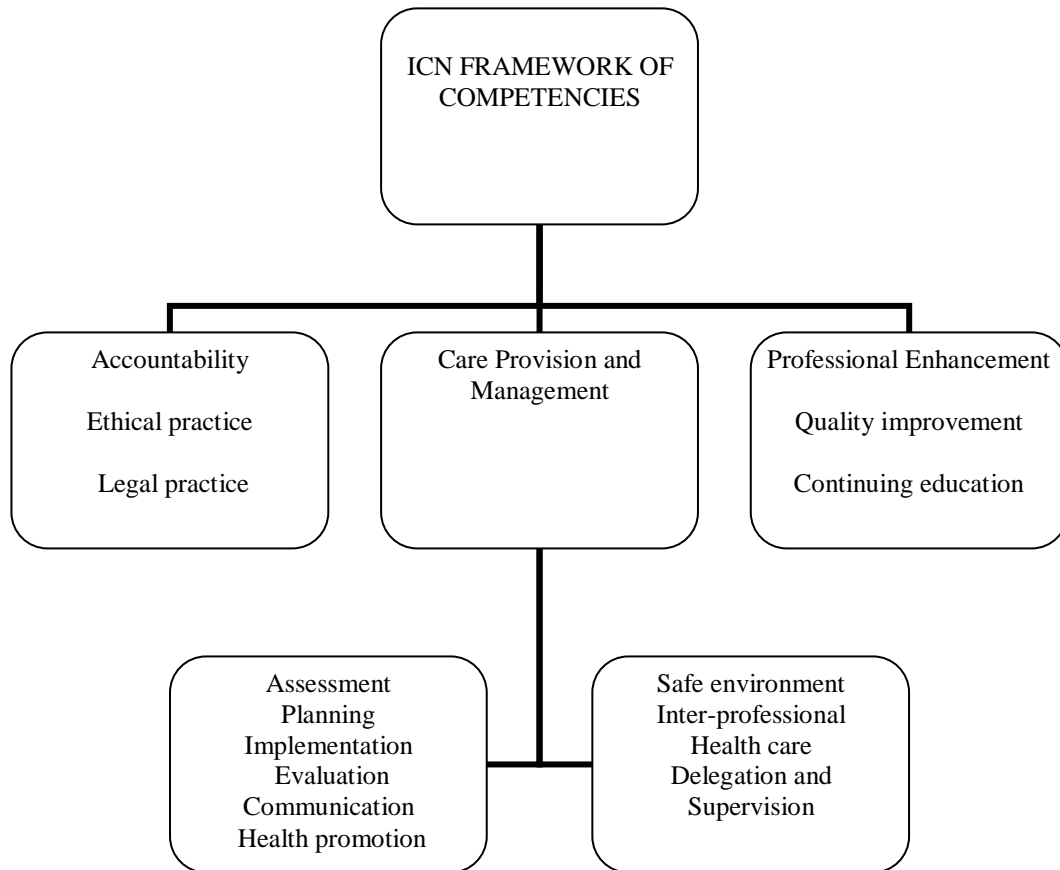


Figure 2.2: ICN Framework of Competencies for the Generalist Nurse (Alexander and Runciman 2003)

Figure 2.2 indicates that the ICN framework of competency identifies specific dimensions of competencies which can be expected from the newly qualified professional nurse on entry into employment.

The framework includes dimensions with item numbers in each dimension and is as follows:

### **Clinical Care**

This dimension involves care being given to patients holistically. This means encompassing aspects such as physical, spiritual, psycho-social and cultural in

providing care to patients. Clinical care skills are perceived as a basic competency of a professional nurse across societies (Liu, et al. 2007).

Moeti, Van Niekerk and Van Velden (2004) found that although new graduate nurses in South Africa have sufficient theoretical knowledge, they were not competent in basic nursing skills, because they were unable to integrate theory to practice. Morolong and Chabeli (2005) in South Africa found that newly qualified nurses had very little knowledge of nursing diagnosis and were not competent in the skills of nursing diagnosis. They also lacked basic knowledge, skills, attitudes and values of the nursing process.

### **Leadership**

Leadership is a competency that pursues one's ability to engage in executing a leadership function regardless of one's specific job title (Liu et al. 2007) According to Quinn (1997) leadership depends on relationships within a group. This involves leading, delegating and coordinating aspects of work amongst fellow colleagues.

Kelly and Courts (2007) concluded in their study regarding professional self-concept of new graduates, that new graduates scored very low in leadership. Wangenstein et al. (2007) concur that newly qualified nurses in their study experienced the leadership role as challenging, due to lack of preparation with regard to clinical demands and inability to prioritise the workload.

### **Interpersonal Relation**

This dimension does not only involve communication skills, but the effectiveness of the communication in relation to others. According to Quinn (1997) interpersonal effectiveness are dependent upon four components which is, trust, self-disclosure, feedback from others and self-awareness. The interpersonal relation dimension involves trust, commitment, working together as a team, acknowledging other's cultures and beliefs and documenting care in a clear and concise manner. Communication is important to ensure the smooth running of a ward. Carlisle et al. (1999) assert that nurse managers noted that newly qualified nurses found it difficult to fit into the healthcare team and have no concept of what teamwork entails.

### **Legal/Ethical**

This competency relates to ensuring the protection of individuals and the community and accountability to the public. It is important that professional nurses are knowledgeable regarding organization policy and legislation governing nursing practice.

Goh and Watt (2003) found that newly qualified nurses are overwhelmed by being legally and ethically responsible for taking care of patients.

### **Professional Development**

This dimension involves two main aspects of competency. Firstly, competencies relating to the ongoing and dynamic process in the professionalisation of nursing; and secondly, competencies reflect the process of personal advancement of skill levels and professional achievement (Liu et al. 2007).

Professional nurses must display awareness of personal strengths and weaknesses, be responsible for recognising their own learning needs and use it for their own personal and professional growth. Boychuck Duchscher and Cowin (2004) found that new graduates felt that there were a lack of support in their working environment to provide opportunities for professional development and autonomy.

### **Teaching/Coaching**

Teaching/ coaching is an important skill that professional nurses must possess (Quinn 1997). This not only involves educating patients, but identifying learning needs of patients, families and junior nurses, coaching junior nurses and being a preceptor to provide support to new nurses. Lofmark et al. (2006) assert that although new graduates were given high scores in teaching patients and relatives, they scored very low in teaching co-workers and students.

### **Critical thinking and research aptitude**

According to Scriven and Paul (1987) critical thinking is the intellectually disciplined process where conceptualizing, applying, analyzing, synthesizing and evaluating information, obtained through observation, experience, reflection, reasoning and communication, is used as a guide to belief and action.

“Critical thinking attempt to reason at the highest level of quality in a fair-minded way and is self-guided and self- disciplined” (Paul and Elder 2007)

Critical thinking and research aptitude competencies includes identifying and prioritizing risks, integration of data from multiple sources, using different ways to search for information and assists in clinical research data collection.

Del Bueno (2005) concluded, using the Performance Based Development System that the majority of new registered nurse graduates lack critical thinking skills and they are unable to relate theory to practice.

The abovementioned Model and Framework have interlinking competencies that is relevant to this study. The ICN framework, which is also used by the SANC to inform professional nurses’ competency in South Africa, was used as a guideline to inform the research instrument of the study.

## **2.9 Conclusion**

In this chapter the introduction, concepts such as competence, clinical competence, competency and proficiency, perception, critical elements of competency, factors influencing competency and the theoretical frameworks were discussed. The concept competency was explored in depth with reference to the ICN framework. Both local and international literature was reviewed.

Chapter 3 discusses the research design and methodology used in the study.

# CHAPTER 3

## RESEARCH DESIGN AND METHODOLOGY

### 3.1 Introduction

This chapter describes the research design and methodology used in the study, including population, data collection, validity and reliability, and ethical considerations. The overall aim of the study was to explore experienced professional nurses' perceptions of newly qualified professional nurses' competency and factors influencing competency. The research methodology facilitates the attainment of the following research objectives:

- Professional nurses' perceptions of newly qualified professional nurse's competency in clinical care, leadership, interpersonal relation, legal/ethical practice, professional development, teaching-coaching, critical thinking and research aptitude.
- Factors that influence competency.

A quantitative, descriptive survey design was used because the purpose was to gather new information and statistics and to describe their significance (Burns & Grove 2003).

### 3.2 Research Design

Burns and Grove (2003:195) define the research design as "a blueprint for conducting a study and is necessary as it maximizes control over factors that interfere with the validity of the finding." In order to do a research study a well prepared guideline is needed to achieve set goals. The researcher chose to use a quantitative approach using a descriptive design in order to explore and describe the phenomenon under investigation. The study was applied research as the knowledge generated from this study could influence improvement of the integration of theory and practice in nursing education, as well as assist in strategies to improve competence development. Polit et al (2001:38) state that the

purpose of applied research is to “solve problems, make decisions or control outcomes in real-life situations”. The following research concepts underpinned this study:

- Quantitative
- Descriptive

### **3.2.1 Quantitative Approach**

According to Burns and Grove (2001:26), quantitative research is a “formal, objective, systematic process in which numerical data is used to obtain information about the world”. This method is used to describe variables, examine relationships between variables and determine cause – effect interactions between variables. The purpose of quantitative research is to describe new situations (Burns and grove 1999). Formal instruments, such as questionnaires, are used to collect information and data is analysed using statistical procedures (Polit and Hungler 1999). The researcher selected a quantitative approach in order to explore and describe experienced professional nurses’ perception of competency of newly qualified nurses and factors influencing competency.

### **3.2.2 Descriptive Design**

According to Burns and Grove (2001:26), descriptive designs help to “identify problems in current practice with the view to improve practice outcomes. A descriptive design allows for more information about characteristics within a specific field of study and provides an image of a situation as it naturally happens (Burns & Grove, 2003).

Descriptive research is not aimed at determining the relationship between independent and dependant variables; no hypothesis is therefore required (Polit & Hungler 1999). The researcher selected a descriptive design in order to describe perceptions of competencies of newly qualified professional nurses and factors influencing competencies.

### **3.3 Research Methodology**

Burns and Grove (2001:26) define research methodology as “the application of all steps, strategies and procedures for gathering and analyzing data in a research investigation in a logical and systematic way”.

#### **Population**

A population is “all the potential individuals who possess specific characteristics in which the researcher is interested” (De Vos 2011:223). The population of this study was experienced professional nurses which constitute the entire amount of professional nurses working at the hospitals in the Western Cape metropole region. The target population for this study was all experienced professional nurses who worked with newly qualified professional nurses at Life Healthcare hospitals in the Western Cape. Eligibility criteria refer to criteria that specify population characteristics (Polit & Hungler 1999). For the purpose of this study, the participants had to:

- Be qualified professional nurses with five or more years clinical experience
- Be registered with the SANC
- Be employed on a full-time or sessional basis at the Life Healthcare hospitals
- Have worked with a newly qualified professional nurse in the past year from July 2010 to July 2011.

#### **Sample**

A sample is a small portion of the population that is selected for a particular study (Burns & Grove 2009). Sampling is the process of selecting a portion of the population (people, events and behaviour) to represent the entire population (Burns & Grove 2009).

In this study the researcher used an all-inclusive sampling approach. All-inclusive sampling means that all experienced professional nurses, who met the inclusion criteria for the study, were included. The sampling was a census as all the professional nurses working with newly qualified nurses at three selected Life Healthcare hospitals were included in the study. Sample size refers to the number



of participants selected to participate in the study. The sample size for this study was 34 professional nurses who had worked with newly qualified nurses.

### **Data-collection instrument**

In this study, data was collected using a structured questionnaire. Polit and Beck (2004:349) describe the questionnaire as “a written formal schedule that participants complete themselves”. Questionnaires are selected for descriptive studies to gather information from individuals, facts about situations or beliefs of the subjects (Burns & Grove 2003). The Competency Inventory for Registered Nurses (Liu et al. 2007), is a peer evaluation instrument that was formulated using the ICN framework of competencies for the generalist nurse as a guideline. Permission has been obtained from the author to use the instrument for this study (see Annexure A). Questionnaires consist of a set of questions and in most cases have predetermined response alternatives (Polit & Hungler 1999). The researcher also devised questions relating to biographical data and factors influencing competency to fulfill the research questions and objectives.

### **Selection of the questionnaire as an instrument**

The selection of the questionnaire involved the following steps:

The researcher consulted literature on instruments used in previous studies done on competency. Various instruments were compared. One existing questionnaire, namely the Competency Inventory for Registered Nurses, was chosen as it addressed the research questions and objectives for this study. The researcher then devised a questionnaire which included the Competency Inventory for Registered Nurses (Section B) and two sections, namely biographical information (Section A) and factors that influence competency (Section C). The draft questionnaire was discussed with the research supervisors and a statistician and their recommendations were implemented. The questionnaire was compiled in English as it is the universal language used by most nurses in the Western Cape.

### **The questionnaire**

The questionnaire consisted of structured, closed questions and was divided into 3 sections.

### **Section A: Biographical data**

The researcher wanted to obtain knowledge about the participants' characteristics and experiences as well as their insight regarding competencies. The participants were asked to indicate their gender, age, education, professional qualifications and years of experience as a professional nurse.

### **Section B: Competency Inventory for Registered Nurses**

The Competency Inventory for Registered Nurses for registered nurses (Liu et al. 2007) is a 55-item peer evaluation instrument which used a 5-point Likert scale (0 = incompetent, 4 = very competent) to measure competencies of newly qualified nurses as asserted by the ICN. Modifications were made to the Liu instrument, by changing the values and adding factors. The values was changed from zero to one, one to two, two to three, three to four, and four to five. The instrument contains the following seven dimensions of nursing care;

Dimension 1: Clinical Care includes 10 items 2, 3, 5, 9, 12, 15, 20, 24, 27 and 38.

Dimension 2: Leadership includes 9 items 13, 14, 28, 32, 33, 36, 39, 43 and 48.

Dimension 3: Interpersonal Relation 8 includes items 4, 18, 22, 23, 30, 34, 35 and 54.

Dimension 4: Legal/Ethical includes 8 items 10, 11, 25, 31, 37, 44, 45 and 49.

Dimension 5: Professional Development includes 6 items 6, 26, 29, 52, 53 and 55.

Dimension 6: Teaching/Coaching includes 6 items 8, 17, 19, 40, 41 and 46.

Dimension 7: Critical Thinking/Research Aptitude includes 8 items 1, 7, 16, 21, 42, 47, 50 and 51.

### **Section C: Factors influencing competencies**

This section included 24 items related to 10 factors influencing competency. It consisted of categories on a 5-point Likert scale (1 =strongly disagree, 5 =strongly agree).

## **3.4 Validity and Reliability**

Validity and reliability are the major criteria for assessing the instruments quality and adequacy (Polit & Beck, 2004).

### 3.4.1 Validity

According to Babbie & Mouton (2001) validity is the accurate measurement of the key concepts related to the research question.

Content validity has to do with whether the device covers the full range of meanings that would be included in a variable being measured. A content valid measuring instrument would provide an adequate sample of all content or elements of the phenomenon to be measured (De Vos et al. 2005). The evidence for content validity of the instrument used by Liu et al. (2007) was supported by ratings of six experts with an average content valid index (CVI) 0.852. Evidence for two additional kinds of validity, namely criterion validity ( $r = .44$ ,  $p < 0.04$ ) and contrasted group-validity ( $p < 0.001$ ), was obtained. The other questions were developed using the research objectives and questions as appoint of departure. The research supervisors and a statistician evaluated the questionnaire.

### 3.4.2 Reliability

According to Burns and Grove (2003) this refers to the consistency, stability and dependability of the measuring instrument that is used to obtain data. An instrument is said to be reliable if it measures accurately and reflects the true score of the attribute under investigation. In this study Cronbach's alpha coefficient was used to test the internal consistency or homogeneity or reliability.

Table 3.1 indicates Cronbach's alpha for the seven dimensions of competency.

**Table 3.1 Cronbach's Alpha for the Dimensions of Competency**

<b>Dimension</b>	<b>Number of Items</b>	<b>Cronbach's Alpha Liu (2007)</b>	<b>Cronbach's Alpha Current Research</b>
D1- Clinical Care	10	0.891	0.922
D2- Leadership	9	0.903	0.929
D3-Interpersonal Relation	8	0.836	0.930
D4- Legal/Ethical Practice	8	0.803	0.913
D5- Prof. Development	6	0.742	0.876
D6- Teaching/Coaching	6	0.718	0.914
D7-Critical thinking/Research aptitude	8	0.847	0.892
<b>Overall Cronbach's Alpha</b>	<b>55</b>	<b>0.908</b>	<b>0.985</b>

The overall Cronbach's alpha is 0.908 and the Cronbach's alphas for the seven dimensions range from 0.718 to 0.90. The questionnaire was modified for the study thus Cronbach's Alpha for the seven dimensions is 0.984 to 0.985 for the modified instrument. The overall Cronbach's Alpha for the modified instrument was 0.98.

Table 3.2 depicts Cronbach's alpha for the factors influencing competency.

**Table 3.2 Cronbach's Alpha for Factors influencing Competency**

<b>Factors influencing competency</b>	<b>Number of items</b>	<b>Cronbach's Alpha</b>
Experience in nursing practice	2	0.457
Learning opportunities	2	0.814
Personal characteristics	4	0.918
Environment	4	0.680
Motivation	3	0.665
Confidence	1	0.611
Expectation placed on nurses	2	0.766
Knowledge supporting actions	2	0.919
Effective preceptorship	3	0.815
Acceptance into the ward team	1	0.671
<b>Overall Cronbach's Alpha</b>	<b>24</b>	<b>0.938</b>

The results indicate that Cronbach's alpha for the 24 items for the factors which influence competency ranged from 0.457 to 0.919. The overall Cronbach's alpha was 0.938.

Reliability of the questionnaire was further established by pretesting it on 10 volunteers who did not participate in the study.

### **3.5 Pilot Study**

According to Burns and Grove (2003) a pilot study are done to determine whether there are any problems with the research design of the instrument and to examine the reliability and validity of the research instruments. The data collection instrument was pretested on 10 individuals who, although they fitted the inclusion criteria of the study, did not participate in the actual study. Their recommendations were considered and implemented.

### **3.6 Ethical Considerations**

According to Brink (2001) the researcher must be ethical in conducting research, be competent in managing resources, acknowledge fairly those who have given guidance and assistance, communicate results accurately and take into consideration the consequences of the research for society.

The following ethical principles were observed in this study:

#### **Right to self-determination**

This is based on the principle of respect for persons and states that humans are free agents who are in control of their own destiny and should be treated with the necessary autonomy (Burns and Grove 2009).

The participants were informed regarding the research and what was expected of them. They were informed that participation is voluntary and that they may withdraw at any time during the study.

#### **Informed Consent**

It is important that each individual be informed of the nature, purpose, scope and procedures used to collect data. The research was individually explained to the participants. A consent form (Annexure B) requested their permission to participate in this study which was voluntary. An information sheet was issued to them regarding risks and benefits of the research.

#### **Right to privacy**

This is the individual's right to decide when, how and under which circumstances personal information will be divulged or with-held from others( Burns and Grove 2009).

The participants were assured of anonymity and that the information received will only be used for the purpose of research, including publications.

#### **Right to confidentiality**

This is the right of individuals to assume that the data collected will be treated with the necessary confidence (Burns and Grove 2009).

The participants were assured that all information and data collected will be kept confidential.

### **Right to fair treatment**

This is based on the ethical principle of justice and states that each person should be treated fairly (Burns and Grove 2009).

The participants were fairly selected for reasons directly related to the problem being studied.

### **Right to beneficence**

This is the individual's right to be protected from any discomfort or harm (Burns and Grove 2009). The individuals were informed of their right to terminate their participation in the research at any time if psychological harm was predicted.

### **Right to the institution**

The rights of the institution were protected by fully disclosing the nature of the study and the researcher's responsibility to the organization. The approval of the Senate Ethics Committee at UWC was obtained as well as permission from the hospital manager of the selected hospitals. This was done to ensure that they were informed about the study and to gain their cooperation.

## **3.7 Data Collection**

In this study, data was collected using a structured questionnaire. Polit and Beck (2004:349) describe the questionnaire as "a written formal schedule that participants complete themselves perceived by professional nurses". The questionnaire was hand delivered to each respondent. A cover letter, explaining the objectives of the study and a consent form was included. The researcher collected the questionnaires personally after two weeks. An all-inclusive sample of 34 experienced professional nurses was identified, out of the population of experienced nurses at three private hospitals of the same group, to participate in the study. They had to give their perceptions of twelve newly qualified professional nurses who completed their training within the period July 2010 to July 2011. Questionnaires were distributed by hand to all 34 participants and they were given two weeks to complete the questionnaire. On collection after two

weeks only 15 participants completed the questionnaire. The other participants have either forgotten or were too busy to complete the questionnaire. The researcher went back four times to collect the questionnaires and after another 2 weeks managed to collect the other nineteen. On checking the questionnaires four was found to be incomplete. Some also has not filled in the consent form but completed the questionnaires. Despite the cover letter which contained relevant information regarding the study, as well as the fact that their anonymity will be assured, some participants still did not feel comfortable completing the consent form. The response rate was 88% (n=30) despite the problems that were encountered during the data collection.

### **3.8 Data Analysis**

The questionnaires were numbered and coded to facilitate data capturing and auditing of captured data. With the help of a statistician the SPSS program was used to collect basic descriptive statistics on perceptions of competence and factors influencing competency. Univariate analysis was be done for simple and group frequency distributions, means and standard deviations of the dependant variable for example sex, age, years of practice experience and for measuring scores in scale items. The Competency Inventory for Registered Nurses by Liu et al. (2007) gives clear instructions on administering and scoring the instrument.

### **3.9 Conclusion**

This chapter discussed the research design and methodology, including the research instrument, method of distribution and collecting of the questionnaires, validity, reliability as well as ethical considerations.

Chapter 4 discusses data analysis and research findings.

## CHAPTER 4

### DATA ANALYSIS AND FINDINGS

#### 4.1 Introduction

This chapter discusses the data analysis and findings. The questionnaire used in this exploratory descriptive study was carefully analysed to ensure that the data gathered was presented clearly with the aid of tables, percentages and graphs, where possible.

The overall aim of this study was to determine experienced professional nurse's perceptions of newly qualified professional nurses' competency and factors influencing competency in ways to make suggestions for improving support with regard to the integration of theory and practice as well as strategies to assist with competence development.

The questionnaire comprised of three sections with a total of 84 structured closed questions.

**Section A** covers the biographical data, qualifications and experience as a professional nurse.

**Section B** contains the 55-item Competency Inventory for Registered Nurses of Liu et al. (2007) and comprised of 7 dimensions.

**Section C** contains 10 factors which influence competency comprising of 24 items.

#### 4.2 Data Analysis

This study uses mainly descriptive analysis. The descriptive analysis consisted of presenting data in the format of frequencies tables, percentages, proportions and graphs and end with an exploratory phase of the factors which are most important through factor analysis by using principal component analysis. To reach this, the data were captured and analysed with IBM SPSS 19. Before going deeply into the data analysis, the reliability of the instrument used was computed by using Cronbach's alpha.



#### 4.2.1 Section A: Biographical data

This section presents the gender distribution, age distribution, professional qualifications and the years of experience as a professional nurse.

##### Gender distribution

The findings indicate that 100% (n=30) of the participants were female as there were no males that fitted the inclusion criteria to participate in this study. The researcher is of the opinion that females generally assume the “caring” role and therefore work in helping professions as nurses. Hlongwa (2003) agrees that the majority of nurses in South Africa are females.

##### Participants’ age distribution

Establishing the age of the participants can indicate their level of maturity and their competency, as they have to perceive newly qualified nurses competency. Figure 4.1 depicts the participants’ age.

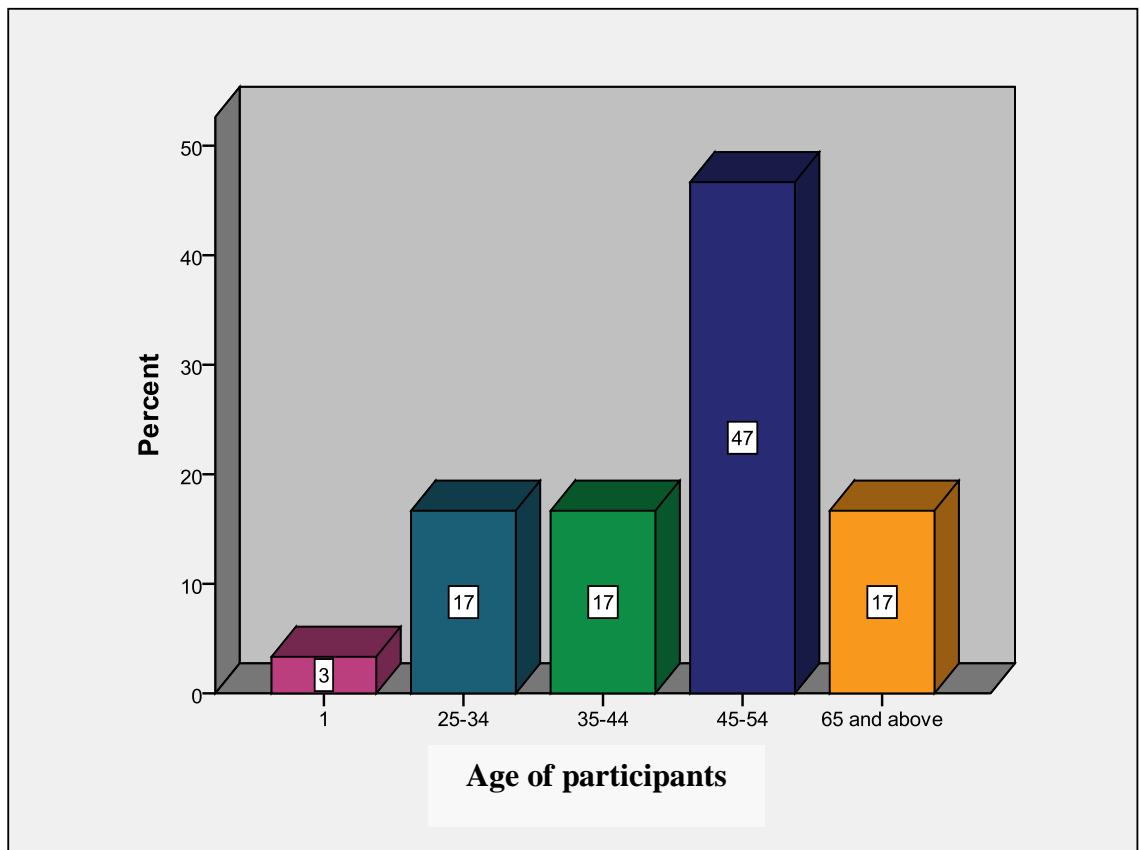
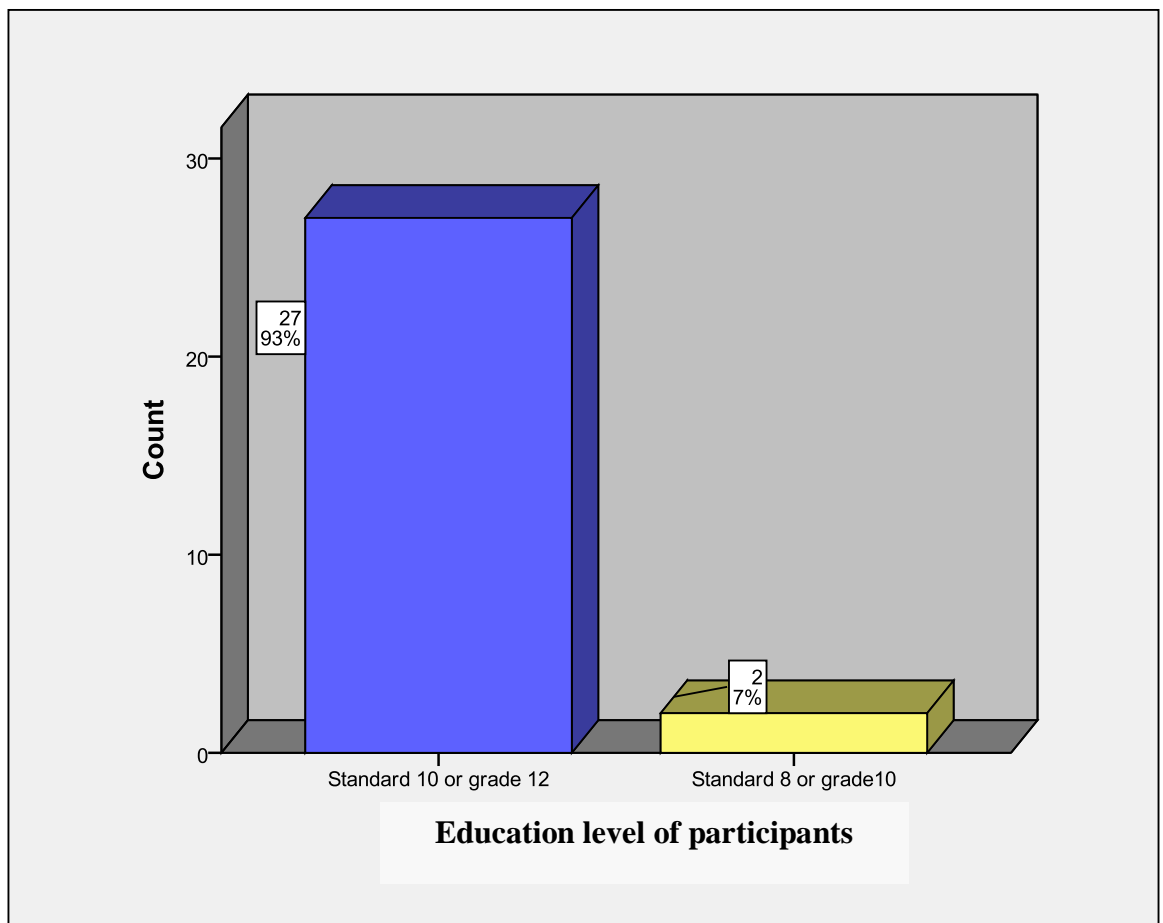


Figure 4.1: Age of the participants ’

The findings indicate that 47% (n=14) of the participants were between the ages 45-54yrs; 17% were between the ages 25-34, 35-44 and 65 and above. As the majority was between 45–54yrs of age it is expected these participants' competency is acceptable in order for them to give their perceptions of others' competency. The findings is consistent with studies done on nursing competencies, which indicate that “nursing is related to age, education, working years, job position, marital status and motivation”(Tzeng & Ketefian 2003:511).

### Education level

This question was included to establish the educational qualifications of the participants.

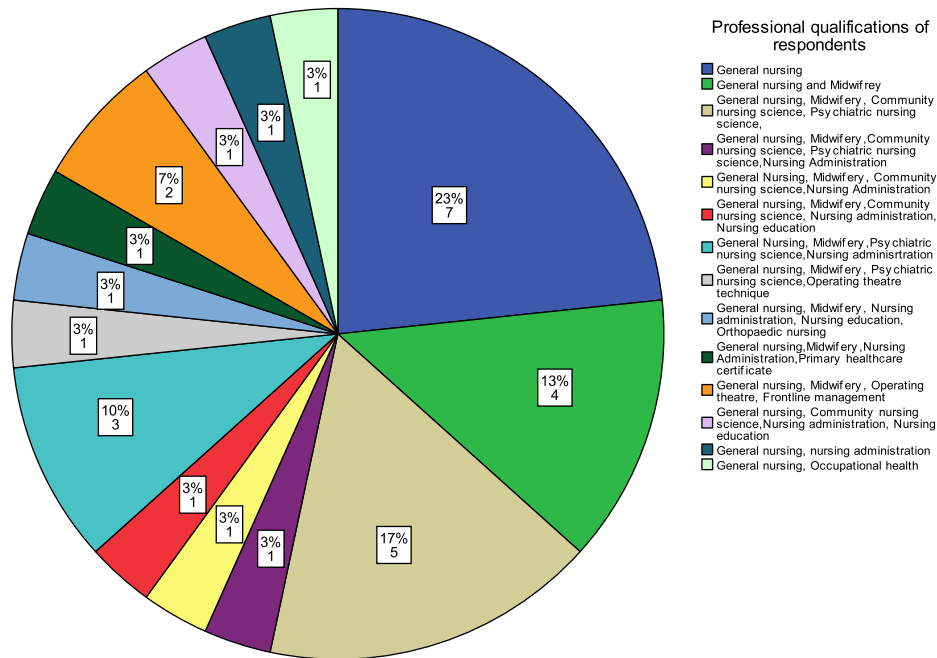


**Figure 4.2: Education level of participants**

As outlined in table 4.2, 93% (n=27) of the participants were qualified in standard 10 or grade 12. 7% (n=2) had an education level of standard 8 or grade 10. A grade 12 certificate is required by the SANC to commence training as a nurse.

## Professional qualifications of participants

This question was included to establish the professional qualifications of the participants.



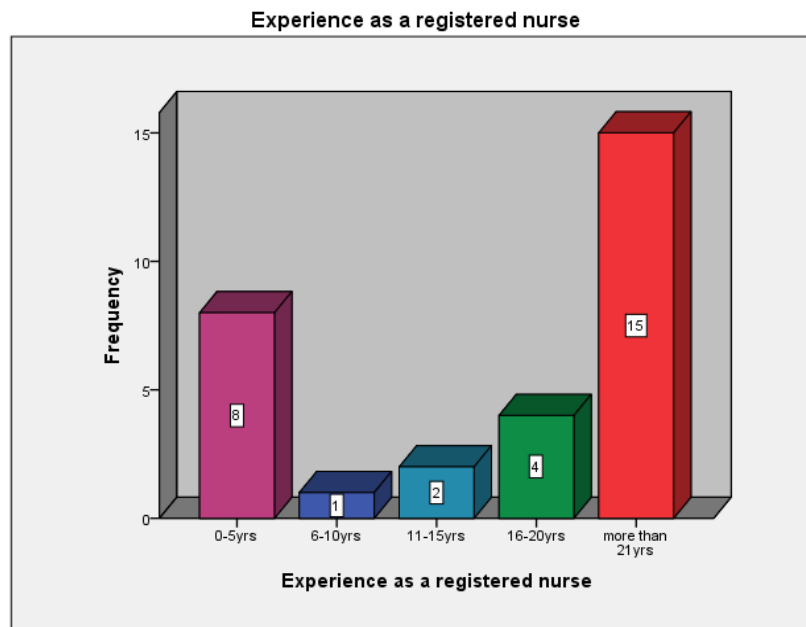
**Figure 4.3: Professional qualifications of participants**

As shown in figure 4.3, the participants had a wide range of nursing qualifications. The majority of participants had general nursing as a qualification 23% (n=7) whereas 17% (n=5) had general nursing, midwifery, community nursing science and psychiatric nursing science as a qualification.

Their wide range of qualifications shows that they are improving their own professional development. This may improve their ability to perceive the accepted standard of competence. However the participants might find current academic demands in nursing challenging and resistance to change may affect their perception of newly qualified nurses' competency (Lofmark et al. 2006)

## Experience as a registered as nurse

The participants' years of experience may indicate how long they have been working in certain clinical areas and whether they are competent to give their perceptions of newly qualified nurses' competence.



**Figure 4.4: Experience as a registered nurse**

As shown in figure 4.4, the majority 50% (n=15) of the participants had more than 21yrs experience as a registered nurse. The least amount of participants 3% (n=1), had 6-10yrs experience as a registered nurse. These findings indicate that the participants met one of the inclusion criteria for the study.

#### **4.2.2 Section B: Competency Inventory for Registered Nurses**

This section contained the 55-item Competency Inventory for Registered Nurses. It is a peer evaluation scale which measure competencies of newly qualified registered nurses, using seven dimensions. The categories were ordinal as the interval between them cannot be regarded as equal (Blaikie 2003).

##### **Dimension 1: Clinical Care**

The researcher included this dimension in order to establish the participants' perceptions of how competent newly qualified professional nurses are in their maintenance of high standard of nursing care.

**Table 4.1: Competency Items: Clinical Care**

<b>COMPETENCY ITEMS</b>	<b>I n (%)</b>	<b>SC n (%)</b>	<b>SoC n (%)</b>	<b>C n (%)</b>	<b>VC n (%)</b>	<b>M</b>	<b>SD</b>
Culturally sensitive care (B2)		1(3)	14(47)	8(27)	7(23)	3.7	0.81
Changes in pt's condition (B3)		6(21)	8(28)	12(41)	3(10)	3.4	0.97
Emotional support to families (B5)	2(7)	3(10)	7(23)	10(33)	8(27)	3.6	1.1
Assess all health dimensions (B9)	1(3)	9(30)	12(40)	6(20)	2(7)	2.8	0.97
Develops nursing care plan for specific patients (B12)	2(7)	2(7)	13(43)	10(33)	3(10)	3.2	1.1
Delivers comprehensive nursing according to plan (B15)	1(3)	5(17)	13(43)	9(30)	2(7)	3.1	0.94
Involve patient & family in planning care (B20)	5(17)	5(17)	10(33)	8(27)	2(7)	2.7	1.2
Utilizes technological advances to improve care (B24)	2(7)	7(24)	8(28)	10(35)	2(7)	3.2	0.91
Identifies & includes immediate pt. needs in care plan (B27)		5(17)	15(52)	7(24)	2(7)	3.2	0.82
Evaluates results of nursing care (B38)		4(13)	11(37)	12(40)	3(10)	3.5	0.88

**I** = Incompetent, **SC** = slightly competent, **SoC** = somewhat competent, **C** = competent, **VC** = very competent, **M** = mean, **SD** = standard deviation

As outlined in table 4.1, the highest scores (33% to 52%) were obtained in seven items in the 'somewhat competent' range and the lowest scores (3%) in the 'slightly competent' and 'incompetent' range. In four items the highest scores (33% to 41%) were in the 'competent' range and the lowest score (7%) in the 'incompetent' range.

The results in table 4.1 indicate that the majority of newly qualified professional nurses are perceived as somewhat competent in the following items;

- Culturally sensitive care
- Assess all health dimensions

- Develops nursing care plan for specific patients
- Delivers comprehensive nursing according to plan
- Involve patient and family in planning care
- Identifies and includes immediate patient needs in care plan

The study done by Morolong and Chabeli (2005) concur with these results. They found that newly qualified professional nurses had very little knowledge of nursing diagnosis and were not competent in the skills of nursing diagnosis. They also lacked basic knowledge, skills, attitudes and values of the nursing process. Lofmark et al. (2004) concur that new graduates was rated low on planning and prioritising nursing interventions. The results in table 4.1 indicate that newly qualified professional nurses are perceived as competent in the following items in this dimension:

- Change in patients condition
- Emotional support to families
- Utilizes technological advances to improve care
- Evaluates results of nursing care

## Dimension 2: Leadership

The researcher included this dimension to establish the participants' perceptions of how competent newly qualified nurses are stepping into a leadership role.

**Table 4.2: Competency Items: Leadership**

COMPETENCY ITEMS	I n (%)	SC n (%)	SoC n (%)	C n (%)	VC n (%)	M	SD
Identifies strengths & weaknesses (B13)	2(7)	7(23)	13(43)	4(13)	4(13)	2.9	1.0
Coordinates relation between multidisciplinary team (B14)	2(7)	2(7)	17(57)	5(17)	4(13)	3.1	0.97
Recognises other's contribution and achievement (B28)		5(17)	13(43)	10(33)	2(7)	3.2	0.79
Accepts and uses criticism constructively (B32)	1(3)	6(21)	13(45)	7(24)	2(7)	3.0	0.99
Delegates responsibility based on abilities of staff (B33)		4(13)	15(50)	2(23)	4(13)	3.4	0.82
Gets group approval before acting (B36)	1(3)	7(24)	9(31)	10(35)	2(7)	3.2	1.0
Develops an atmosphere of teamwork & cooperation (B39)	2(7)	2(7)	16(53)	7(23)	3(10)	3.2	0.84
Promotes trust & open exchange of ideas (B43)	1(3)	4(13)	17(57)	5(17)	3(10)	3.1	0.79
Resolves conflict positively (B48)	2(7)	8(27)	10(33)	9(30)	1(3)	2.9	0.95

**I** = Incompetent, **SC** = slightly competent, **SoC** = somewhat competent, **C** = competent, **VC** = very competent, **M** = mean, **SD** = standard deviation

As outlined in table 4.2, the highest scores (33% to 57%) were obtained in all items except one in this dimension in the 'somewhat competent' range, the lowest score (3%) was in the 'incompetent' and (7%) in 'very competent' range. One item had the highest score (34%) as 'competent' and the lowest score (3%) as 'incompetent'.

The results in table 4.2 indicate that newly qualified professional nurses are perceived as somewhat competent in the following items in this dimension:

- Identifies strengths & weaknesses

- Coordinates relation between multidisciplinary team
- Recognises other's contribution and achievement
- Accepts and uses criticism constructively
- Delegates responsibility based on abilities of staff
- Develops an atmosphere of teamwork & cooperation
- Promotes trust & open exchange of ideas
- Resolves conflict positively

Kelly and Courts (2007) concluded in their study regarding professional self-concept of new graduates, that new graduates scored very low in leadership. Wangenstein et al. (2008) agrees that newly qualified nurses experienced the leadership role as challenging due to lack of preparation with regard to clinical demands and inability to prioritise the workload. Lofmark et al. (2006) concur that newly graduated nurses was rated low in planning work and distribution of tasks.

The results in 4.2 indicate that newly qualified nurses are perceived as competent in the following item in this dimension:

- Gets group approval before acting

### **Dimension 3: Interpersonal Relation**

The researcher included this dimension to establish the participants' perceptions of how competent newly qualified nurses are in their relationships with colleagues, patients and their families.



**Table 4.3: Competency Items: Interpersonal Relation**

<b>COMPETENCY ITEMS</b>	<b>I n (%)</b>	<b>SC n (%)</b>	<b>SoC n (%)</b>	<b>C n (%)</b>	<b>VC n (%)</b>	<b>M</b>	<b>SD</b>
Writes in clear & organised way (B4)	2(7)	5(17)	7(24)	11(38)	4(14)	3.4	1.1
Adjusts actions in relation to others actions (B18)	4(14)	6(21)	11(38)	6(21)	2(7)	2.9	0.97
Expresses disagreements in a constructive manner (B22)	4(14)	6(21)	11(38)	7(24)	1(3)	2.8	1.0
Cooperates with others in team to meet pts' needs (B23)	3(10)	4(14)	11(38)	8(28)	3(10)	3.2	0.97
Communicates facts, ideas to other team members verbally (B30)	2(7)	4(14)	9(31)	11(38)	3(10)	3.3	1.1
Keeps word, commitments & promises (B34)	2(7)	5(17)	7(24)	12(41)	3(10)	3.3	1.1
Acknowledges differences in beliefs & culture (B35)		3(10)	9(30)	13(43)	5(17)	3.7	0.91
Willing to share workload (B54)	1(3)	4(13)	10(33)	8(27)	7(23)	3.5	1.0

**I** = Incompetent, **SC** = slightly competent, **SoC** = somewhat competent, **C** = competent, **VC** = very competent, **M** = mean, **SD** = standard deviation

As outlined in table 4.3, the highest scores (33% to 38%) obtained in four items in this dimension were in the 'somewhat competent' range and the lowest scores (3%) were in

'very competent' and 'incompetent' range. The other four items scored (38% to 43%) highest in the 'competent' and lowest (7%) in the 'incompetent' range.

The results in table 4.3 indicate that newly qualified professional nurses are perceived as somewhat competent in the following items in this dimension:

- Adjusts actions in relation to others actions
- Expresses disagreements in a constructive manner

- Cooperates with others in team to meet pts' needs
- Willing to share workload

Carlisle et al. (1999) concur that nurse managers noted that newly qualified nurses found it difficult to fit into the healthcare team and has no concept of what teamwork entails. Rydon, Rolleston and Mackie (2008:614) agree that "graduates experienced difficulty in their relationships with staff".

The results in table 4.3 indicate that newly qualified nurses are perceived as competent in the following items in this dimension:

- Writes in clear & organised way
- Communicates facts, ideas to other team members verbally
- Keeps word, commitments & promises
- Acknowledges differences in beliefs & culture

Mashburne, Engelke and Swanson (2009:430) concurs that new graduates "who met the criteria for problem management (performance-based competence) were more confident" in their interaction with patients, families and doctors.

#### Dimension 4: Legal/ Ethical

The researcher included this dimension to establish the participants' perception of whether newly qualified nurses are competent to practice in accordance with common law and policies as laid down by the institutions.

**Table 4.4: Competency Items: Legal/Ethical**

COMPETENCY ITEMS	I n (%)	SC n (%)	SoC n (%)	C n (%)	VC n (%)	M	SD
Nursing practice within legal & organisational policy (B10)	1(3)	3(10)	14(47)	9(30)	3(10)	3.2	0.87
Functions within legislative and common law affecting nursing (B11)	1(3)	6(21)	10(35)	10(35)	2(7)	3.1	0.97
Takes responsibility for own performance (B25)	2(7)	7(24)	11(38)	7(24)	2(7)	2.9	0.99
Advocates for rights of pts. (B31)		6(21)	11(38)	7(24)	5(17)	3.4	0.92
Respects pts' right to privacy (B37)			8(27)	15(50)	7(23)	3.9	0.69
Ensures confidentiality and security of all information re pts. (B44)		7(23)	9(30)	8(27)	6(20)	3.4	1.1
Reports malpractice incidents (B45)	1(3)	4(14)	7(24)	14(48)	3(10)	3.5	1.0
Respects pts' right to choice (B49)		4(14)	4(14)	19(66)	2(7)	3.6	0.83

**I** = Incompetent, **SC** = slightly competent, **SoC** = somewhat competent, **C** = competent, **VC** = very competent, **M** = mean, **SD** = standard deviation

As outlined in table 4.4 the highest scores (30% to 47%) obtained in five items in this dimension were in the 'somewhat competent' range and the lowest score (3%) in the 'incompetent' range. The other three items had the highest scores (48% to 66%) in the 'competent' and the lowest score (3%) in the 'incompetent' range.

The results in table 4.4 indicate that newly qualified nurses are perceived as somewhat competent in the following items in this dimension:

- Nursing practice within legal and organisational policy
- Functions within legislative and common law affecting nursing
- Takes responsibility for own performance

- Advocates for rights of pts.
- Ensures confidentiality and security of all information re pts.

Goh and Watt (2003) concur that newly qualified nurses are overwhelmed by being legally and ethically responsible for taking care of patients.

The results in table 4.4 indicate that newly qualified nurses are perceived as competent in the following items in this dimension:

- Respects pts' right to privacy
- Reports malpractice incidents
- Respects pts' right to choice

### Dimension 5: Professional Development

This dimension was added by the researcher as to establish the participants' perceptions of newly qualified nurses' competency with regard to personal and professional growth.

**Table 4.5: Competency Items: Professional Development**

COMPETENCY ITEMS	I n (%)	SC n (%)	SoC n (%)	C n (%)	VC n (%)	M	SD
Professional Organisations (B6)	1(3)	6(20)	10(33)	9(30)	4(13)	3.1	1.1
Self-awareness of personal limitations & strengths (B26)	1(4)	3(11)	16(57)	5(18)	3(11)	3.3	0.85
Understands relevant & current information re health system (B29)	1(3)	4(14)	11(38)	10(35)	3(10)	3.3	1.0
Uses learning opportunities for personal & professional growth (B52)		2(7)	15(50)	8(27)	5(17)	3.4	0.77
Recognises own learning needs (B53)	2(7)	2(7)	8(27)	12(40)	6(20)	3.6	1.2
Displays self- direction in personal development (B55)	2(7)	3(10)	11(37)	8(27)	6(20)	3.3	1.2

**I** = Incompetent, **SC** = slightly competent, **SoC** = somewhat competent, **C** = competent, **VC** = very competent, **M** = mean, **SD** = standard deviation

As outlined in table 4.5, five items had the highest scores (33% to 50%) in the ‘somewhat competent’ range and the lowest score (3%) in the ‘incompetent’ range. The other one item had the highest score (40%) as ‘competent’ and the lowest score (7%) as ‘incompetent’.

The results in table 4.5 indicate that newly qualified nurses are perceived as somewhat competent in the following five items in this dimension:

- Professional Organisations
- Self-awareness of personal limitations and strengths
- Understands relevant and current information re health system
- Uses learning opportunities for personal and professional growth
- Displays self- direction in personal development

Boychuck Duchsher and Cowin (2004) concur that new graduates felt that there were a lack of support in their working environment to provide opportunities for professional development and autonomy.

The results in table 4.5 indicate that newly qualified nurses are perceived as competent in the following item in this dimension:

- Recognises own learning needs

### **Dimension 6: Teaching/Coaching**

This dimension was included by the researcher to establish the participants’ perception of newly qualified nurses’ competency in teaching patients, their families and colleagues.

**Table 4.6: Competency Items: Teaching/Coaching**

<b>COMPETENCY ITEMS</b>	<b>I n (%)</b>	<b>SC n (%)</b>	<b>SoC n (%)</b>	<b>C n (%)</b>	<b>VC n (%)</b>	<b>M</b>	<b>SD</b>
Patient teaching opportunities (B8)	4(13)	6(20)	8(27)	9(30)	3(10)	2.8	1.2
Initiates orientation program for new nurses (B17)	5(17)	8(27)	12(41)	3(10)	1(3)	2.5	0.83
Takes up preceptor role to support new nurses (B19)	3(10)	7(23)	12(40)	6(20)	2(7)	2.8	1.0
Develops a teaching strategy (B40)	5(17)	6(20)	9(30)	8(27)	2(7)	2.8	1.2
Coaches junior nurses to meet task & developmental needs (B41)	2(7)	7(24)	11(38)	6(21)	3(10)	2.9	1.1
Identifies learning needs of pts', families & junior nurses (B46)	1(3)	5(17)	12(41)	7(24)	4(14)	3.2	0.98

**I** = Incompetent, **SC** = slightly competent, **SoC** = somewhat competent, **C** = competent, **VC** = very competent, **M** = mean, **SD** = standard deviation

As outlined in table 4.6, five items had the highest scores (38% to 41%) in the 'somewhat competent' range and the lowest score (3%) in the 'incompetent' range. The other one item had the highest score (30%) in the 'competent' and the lowest score (10%) in the 'very competent' range.

The results in table 4.6 indicate that newly qualified professional nurses are perceived as somewhat competent in the following items in this dimension:

- Initiates orientation program for new nurses
- Takes up preceptor role to support new nurses
- Develops a teaching strategy
- Coaches junior nurses to meet task and developmental needs
- Identifies learning needs of pts', families and junior nurses

The results in table 4.6 indicate that newly qualified nurses are perceived as competent in the following item in this dimension:

- Patient teaching opportunities

Lofmark et al. (2006) concur that, although new graduates were given high scores in teaching patients and relatives, they scored very low in teaching co-workers and students.

### Dimension 7: Critical Thinking/Research Aptitude

This dimension was included to establish the participants' perception of the competency of newly qualified nurses' critical thinking skills and research aptitude.

**Table 4.7: Competency Items: Critical thinking/ Research Aptitude**

COMPETENCY ITEMS	I n (%)	SC n (%)	SoC n (%)	C n (%)	VC n (%)	M	SD
Identifies priority risk (B1)	1(3)	2(7)	14(47)	12(40)	1(3)	3.3	0.82
Integrates data from sources (B7)	1(3)	11(38)	10(35)	6(27)	1(3)	2.7	0.91
Uses different ways to search for information (B16)	3(10)	8(27)	11(37)	5(17)	3(10)	2.7	1.0
Figures out more than one way to solve clinical problems (B21)	7(23)	4(13)	15(50)	4(13)		2.5	0.97
Assists in research data collection (B42)	5(17)	6(20)	11(37)	5(17)	3(10)	2.7	1.1
Makes decisions reflecting both knowledge & good judgment (B47)	1(3)	5(17)	12(40)	9(30)	3(10)	3.2	0.99
Incorporates relevant research findings into nursing care (B50)	2(7)	6(20)	15(50)	6(20)	1(3)	2.8	0.76
Defends decisions using scientific principles (B51)	2(7)	4(14)	16(55)	5(17)	2(7)	3.0	0.80

I = Incompetent, SC = slightly competent, SoC = somewhat competent, C = competent, VC = very competent, M = mean, SD = standard deviation

As outlined in table 4.7, the highest scores (37% to 55%) in seven items were in the 'somewhat competent' range and the lowest scores (3%) were in the 'incompetent' and 'very competent' range. The one item had the highest score (38%) in the 'slightly competent' range.

The results in table 4.7 indicate that newly qualified professional nurses were perceived as somewhat competent in all items in this dimension.

- Identifies priority risk

- Integrates data from sources
- Uses different ways to search for information
- Figures out more than one way to solve clinical problems
- Assists in research data collection
- Makes decisions reflecting both knowledge and good judgement
- Incorporates relevant research findings into nursing care
- Defends decisions using scientific principles

Del Bueno (2005) agrees that the majority of new registered nurses lack critical thinking skills and they are unable to relate theory to practice. Moeti et al. (2004) concluded that although new graduate have sufficient theoretical knowledge, they were not competent in basic nursing skills, because they were unable to integrate theory to practice. Morolong and Chabeli (2005) concur that newly qualified nurses lack critical thinking skills in their rendering of nursing care.

#### **Mean scores for sub-categories in each dimension.**

The total score range is **1** to **275**. High total score indicates high overall competency; high mean score of each sub-category indicates high competency in that dimension.

- Mean >3 (or Total = 166 – 275) **High**
- Mean 2<3 (or total =111 – 165) **Middle**
- Mean <2 (or total < 110) **Low**

**Table 4.8: Mean scores for each Dimension**

<b>Dimension</b>	<b>n = %</b>	<b>Levels</b>	<b>Mean</b>	<b>SD</b>
D1- Clinical Care	17(63)	Middle	24.10	2.03
	10(37)	High	37	5.01
D2- Leadership	2(7)	Low	18	0.005
	9(32)	Middle	23.11	2.89
	17(61)	High	32.76	4.66
D3- Interpersonal Relation	3(11)	Low	12.67	2.517
	6(22)	Middle	19.33	1.751
	18(67)	High	29.44	3.899
D4- Legal/Ethical	8(30)	Middle	19.5	1.414
	19(70)	High	30.52	3.58
D5- Professional Development	9(32)	Middle	15.005	1.658
	19(68)	High	22.631	3.639
D6- Teaching/Coaching	7(25)	Low	10.57	1.813
	10(36)	Middle	16.30	2.111
	11(39)	High	22.55	3.671
D7- Critical Thinking/Research Aptitude	5(18)	Low	15.20	0.837
	13(46)	Middle	21.62	2.219
	10(36)	High	29.00	4.472

SD = Standard Deviation



### **Dimension 1: Clinical Care**

As outlined in table 4.8, a mean score of  $2 < 3$  and  $> 3$  was obtained in the sub-categories. The highest score was 63% (n=17) and the middle score was 37% (n=10). This indicates that the majority of the participants perceive newly qualified nurses as high in competency and 10 perceived them as somewhat competent in this dimension.

Bartlett, Simonite, Westcott and Taylor (2000) concur that graduates and diplomates obtained high mean scores in competencies such as assessment, planning and intervention in nursing care.

### **Dimension 2: Leadership**

As outlined in table 4.8, a mean score of  $< 2$ ,  $2 < 3$  and  $> 3$  was obtained in the sub-categories. The highest score was 61% (n=17), the middle score was 32% (n=9) and the low score was 7% (n=2). This indicates that the majority of the participants perceive newly qualified nurses as high in competency, 9 perceive them as somewhat competent and 2 perceive them as low in competency in this dimension.

Bartlett et al. (2000) concur that diplomates achieved high mean scores in leadership as a competency within their first year post qualification. Kelly and Courts (2007) concluded in their study regarding professional self-concept of new graduates, that new graduates scored very low in leadership.

### **Dimension 3: Interpersonal Relation**

As outlined in table 4.8 a mean score of  $< 2$ ,  $2 < 3$  and  $> 3$  was obtained in the sub-categories. The highest score was 67% (n=18), the middle score was 22% (n=6) and the low score was 11% (n=3). This indicates that the majority of participants perceive newly qualified nurses as high in competency, 6 perceive them as somewhat competent and 3 perceive them as low in competency in this dimension.

Lofmark et al. (2006) concur that experienced nurses assessed new graduates' ability to co-operate and communication to be strongly developed.

#### **Dimension 4: Legal/ Ethical**

As outlined in table 4.8 a mean score of  $2 < 3$  and  $> 3$  was obtained in the sub-categories. The highest score was 70% (n=19) and the middle score was 30% (n=8). This indicates that the majority of participants perceive newly qualified nurses as high in competency and 8 perceive them as somewhat competent in this dimension.

Lofmark et al. (2006) concur that experienced nurses perceived new graduates ethical awareness as being strongly developed.

#### **Dimension 5: Professional Development**

As outlined in table 4.8 a mean score of  $2 < 3$  and  $> 3$  was obtained in the sub-categories. The highest score was 68% (n=19) and the middle score was 32% (n=9). This indicates that the majority of participants perceive newly qualified nurses as high in competency and 9 perceive them as somewhat competent in this dimension.

Bartlett et al. (2000) concur that graduates achieved high mean scores in professional development as a competency. Lofmark et al. (2006) concluded that experienced professional nurses perceive new graduates competence with regard to self-knowledge to be strongly developed.

#### **Dimension 6: Teaching/Coaching**

As outlined in table 4.8 a mean score of  $< 2$ ,  $2 < 3$  and  $> 3$  was obtained in the sub-categories. The highest score was 39 % (n=11), the middle score was 36% (n=10) and the low score was 25% (n=7). This indicates that 11 participants perceive newly qualified nurses as high in competency, 10 perceive them as somewhat competent and 7 perceive them as low in competency in this dimension. This means that the majority of participants perceive newly qualified nurses as low in competency in this dimension.

Lofmark et al, (2004) concur that, although new graduates were given high scores in teaching patients and relatives, they scored very low in teaching co-workers and students.

#### **Dimension 7: Critical Thinking/Research Aptitude**

As outlined in table 4.8 a mean score of  $< 2$ ,  $2 < 3$  and  $> 3$  was obtained in the sub-

categories. The highest score was 46% (n=13) in the middle category, 36% (n=10) was in the high category and 18% (n=5) was in the low category. This indicates that the majority of the participants perceive newly qualified nurses as low in competency in this dimension.

Del Bueno (2005) agrees that the majority of new registered nurses lack critical thinking skills and they are unable to relate theory to practice.

Morolong and Chabeli (2005) concur that newly qualified nurses lack critical thinking skills in their rendering of nursing care.

The overall mean for the 55 competencies are 174.71 with a standard deviation of 39.776. The mean for the individual competencies are outlined in tables 4.1 to 4.8.

### 4.2.3 Section C: Factors influencing competency

This section dealt with factors influencing competency of newly qualified nurses as perceived by experienced professional nurses.

**Table 4.9: Factors influencing competency**

Factors influencing competency	Sd n (%)	DA n (%)	Neutral n (%)	Agree n (%)	SA n (%)	Mean	SD
Experience at College (C10)	2(7)	4(14)	4(14)	13(45)	6(21)	3.65	1.198
Experience at hospital (C11)		1(3)	5(17)	12(41)	11(38)	4.23	0.710
Consolidation knowledge & skill (C20)		3(11)	6(22)	10(37)	8(30)	3.85	1.008
Time for reflection (C21)		3(10)	4(13)	18(60)	5(17)	3.85	0.784
Eagerness to learn (C31)		1(3)	4(13)	11(37)	14(47)	4.35	0.689
Positive attitude (C32)		2(7)	5(17)	8(27)	15(50)	4.31	0.788
Activities that increase abilities (C33)		1(3)	4(13)	13(43)	12(40)	4.15	0.834
Openness to criticism (C34)	1(3)	6(20)	6(20)	7(23)	10(33)	3.77	1.177

**Sd** = strongly disagree, **DA** = disagree, **SA** = strongly agree, **SD** = standard deviation

### **Experience in nursing practice**

This factor includes 2 items which are C10 and C11 (ref. the questionnaire section C). In the items C10 and C11, the highest scores were noted in the ‘agree’ category (45% and 41%) and the lowest score was in the ‘strongly disagree’ category (7%) and the ‘agree’ category (3%). (See table 4.9).

This indicates that the majority of the participants perceived experience in nursing practice as a factor influencing competency.

Mashburne et al. (2009) assert that experience positively affect the preparation of new nurses for practice in the clinical field. Scott, Engelke and Swanson (2008) assert that experienced nurses are more competent in handling multiple priorities and larger caseloads, but new graduate nurses are often placed in at – risk areas. Benner (2001) asserts that by experience, preconceived ideas and theory are improved through continuous exposure to practical situations. Experience gained through repeated practice and observation of more experienced colleagues is regarded as invaluable for development of competency in psychomotor and critical thinking skills (Khomeiran, Kiger & Ahmadi 2006).

### **Learning opportunities**

This factor includes 2 items which are C20 and C21 (ref. the questionnaire section C). In items C20 and C21 the highest scores was noted in the ‘agree’ category (37% and 60%) and the lowest score was in the ‘disagree’ category (11% and 10%). (See table 4.9). The majority of the participants perceive learning opportunities as a factor influencing competency.

These learning opportunities that challenge their abilities and allow them to reflect on their strengths and weakness will lead to improvement of their competency. Khomeiran et al. (2006). Exposing new graduates to unfamiliar situations, could negatively affect their competency development as it can lead to decreased quality and risk to patient care. Clarke and Holmes (2006) found in their study that the pressures of work in busy areas often meant that there was no time to integrate and consolidate skills and knowledge and limited possibilities for reflection during the working day.

## Personal Characteristics

This factor includes 4 items which are C31, C32, C33 and C34 (ref. questionnaire section C). The items C31, C32, C34 had the highest scores in the ‘strongly agree’ category (47%, 50% and 33%) and the lowest score in the ‘disagree’ category (3%). C33 had the highest score in the ‘agree’ category (43%) and the lowest score in the ‘disagree’ category (3%). (See table 4.9). This indicates that the majority of the participants perceive personal characteristics as a factor influencing competency.

According to Khomeiran et al. (2006:69) personal characteristics such as nurses’ eagerness to learn new things, to make a concerted effort to apply them in the correct manner and being open to criticism have a positive influence on competency. Goh and Watt (2003) reported that participants in their study felt that positive feedback rather than negative or no feedback, improved nurses’ confidence and had a positive effect on their competence.

**Table 4.10: Factors influencing competency**

Factors influencing competency	Sd n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	SA n (%)	Mean	Std. Deviation
Short placements (C40)	1(4)	5(18)	6(21)	9(32)	7(25)	3.54	1.208
Conducive environment (C41)	1(3)	1(3)	5(17)	13(45)	9(31)	3.88	0.993
Up to date with technology (C42)		4(13)	5(17)	12(40)	9(30)	3.85	.967
Time to consolidate knowledge (C43)		3(11)	7(26)	8(33)	8(30)	3.85	1.008
Salary (C50)	1(4)	4(14)	6(21)	8(29)	9(32)	3.77	1.177
Patient satisfaction (C51)	1(3)	4(14)	6(21)	10(34)	8(28)	3.77	1.070
Accepts accountability(C52)		4(13)	5(17)	11(37)	10(33)	3.88	.993
Confidence (C60)		2(7)	6(20)	9(30)	13(43)	4.04	.999

**Sd** = strongly disagree, **DA** = disagree, **SA** = strongly agree, **SD** = standard deviation

## **Environment**

This factor includes 4 items which are C40, C41, C42 and C43 (ref. the questionnaire section C). The items C40, C41, C42 and C43 had the highest score in the 'agree' category (32%, 45%, 40% and 33%) and the lowest score (3%) was in the 'strongly disagree' category and in the 'disagree' category (13% and 11%). (See table 4.10). The majority of the participants perceive the environment as a factor influencing competency.

Situational variables within the environment can influence performance and can have a negative effect on competence development (Fitzpatrick, While and Roberts 1994). Boychuck Duchscher and Cowin (2004) indicate that environmental factors at clinical level such as staff shortages, patient acuity and pressures to role expectations can negatively affect new graduates to improve their competence. Scot, Engelke and Swanson (2008), reported that placing new nurses in well-staffed units, where they will not be overwhelmed by daily workloads, will improve competence.

## **Motivation**

This factor includes 3 items which are C50, C51 and C52 (ref. the questionnaire section C). The items C50, C51 and C52 had the highest scores in the 'agree' category (29%, 34% and 37%) the lowest scores was in the 'strongly disagree' category (3%) and the 'disagree' category (13 %). (See table 4.10). The majority of participants perceive motivation as a factor influencing competency.

Patient satisfaction and the transition from student to graduate nurse, which makes them accountable, were most mentioned motivators (Khomeiran et al. 2006). Pedley and Arber (1997:409) noted in their study that " participants pointed out that taking on responsibility had given them the opportunity to acquire skills of self-motivation, time management and assertiveness" Pedley and Arber (1997) noted in their study that " participants pointed out that taking on responsibility had given them the opportunity to acquire skills of self-motivation, time management and assertiveness" Demotivators included unjustified behaviours by managers, engaging in tasks meant for lower categories and non-competitive salaries were seen as having a negative effect on competence development (Khomeiran et al. 2006).

## Confidence

The highest score were in the ‘strongly agree’ category (43%) and the lowest score in the ‘disagree’ category (3%). (See table 4.10). The majority of participants perceive confidence as a factor influencing competency.

The assumption of Clarke and Holmes (2006) that newly qualified professional nurses are not competent to practice independently appears to reflect a lack of confidence on their behalf, but also an inability by more experienced staff to display more faith in the capabilities of these nurses due to previous experiences. This in turn affects confidence in their abilities and confidence placed in them by others. Greenwood (2000) reported that if treated considerably by senior colleagues and having their learning needs recognized and responded to, unremarkably increases the confidence of new graduate nurses. It seems as if choice, autonomy and relevance increases newly qualified nurses’ confidence and make them more aware of and receptive to their own learning needs (Pedley and Arber 1997).

**Table 4.11. Factors influencing competency**

Factors influencing competency	Sd n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	SA n (%)	Mean	Std. Deviation
Exposure to skills (C70)		2(7)	5(17)	12(40)	11(37)	3.96	.916
Confidence in their abilities (C71)		1(3)	6(20)	15(50)	8(27)	3.92	.796
Sound theoretical knowledge (C80)		1(3)	7(23)	14(47)	8(27)	3.92	.796
Knowledge applied in practice (C81)		1(3)	8(27)	12(40)	9(30)	3.96	.824
Role overload of preceptors (C90)	1(4)	1(3)	9(32)	9(32)	8(29)	3.77	1.070
Consistency of preceptors (C91)		2(7)	9(32)	9(32)	8(29)	3.85	.967
Guidance and support (C92)		1(3)	5(17)	15(52)	8(27)	4.00	.800
Acceptance into team (C100)		3(10)	4(13)	11(37)	12(40)	4.12	.909

**Sd** = strongly disagree, **DA** = disagree, **SA** = strongly agree, **SD** = standard deviation

### **Expectation placed on nurses by themselves and others**

This factor includes 2 items which are C70 and C71 (ref. questionnaire section C). The items C70 and C71 had the highest score in the 'agree' category (40% and 50%) and the lowest score in the 'disagree' category (3%). (See table 4.11). Most of the participants perceive expectation placed on nurses as a factor influencing competency.

Mooney (2007) states that expectation placed on newly qualified graduates by ward managers, doctors and patients was found to be high and unreasonable and made them feel ill-prepared and incompetent. Newly qualified nurses place unrealistic expectations on themselves, by working twice as hard, to prove that they are capable as nurses (Kelly 1996).

### **Knowledge supporting actions**

This factor includes 2 items which are C80 and C81 (ref. the questionnaire section C). The items C80 and C81 had the highest score in the 'agree' category (47% and 40%) and the lowest score in the 'disagree' category (3%). (See table 4.11). Most of the participants perceive knowledge supporting actions as a factor influencing competency.

According to Kelly (1998) new graduates are anxious about not having enough knowledge to perform competently and making mistakes. Despite being optimistic of their future role newly qualified professional nurses felt that their clinical experience as a student did not assist them in their transition and they felt unprepared (Goh and Watt 2003). It is important that newly qualified professional nurses have a sound theoretical knowledge and uses it correctly in practice as Clarke & Holmes (2006:1218) states, that knowledge must support actions. Theoretical knowledge is beneficial if applied to real needs in practice (Khomeiran et al. (2006).

### **Effective preceptorship including both support and challenge**

This factor includes 3 items which are C90, C91 and C92 (ref. the questionnaire section C). The items C90, C91 and C92 had the highest score in the 'agree' category (32%, 32% and 52%) and the lowest score in the 'strongly disagree' category (4%) and the 'disagree' category (3%). (See table 4.11). Most of the participants perceive effective preceptorship as a factor influencing competency.



Mills, Francis and Bonner (2005) indicate that socialization is essential for these new nurses and preceptorship is a strategy that can assist in skills' acquisition. Ulrich (2003) suggested that preceptors have a positive influence on graduates' confidence in their abilities in their first year, but only if there is consistency and not frequent changing of preceptors. The guidance and support received by newly qualified professionals through preceptorship was perceived as crucial in the development of competency (Clarke and Holmes 2006). Greenwood (2000) however alerts that preceptorship can add to the already increased work load in areas and can lead to resentment and hostility. This means that newly qualified graduates will be at a disadvantage as they will not get the support they need.

### **Acceptance into the ward team**

The highest score were in the 'strongly agree' category (40%) and the lowest score in the 'disagree' category (10%). (See table 4.11). Most of the participants perceive acceptance into the ward team as a factor influencing competency.

According to Clarke & Holmes (2006) newly qualified professional nurses felt that by giving them the opportunity to perform "specialist" tasks made their acceptance into the ward team so much easier. Carlisle (1999) found that nurse managers' perceptions are that new graduates had difficulty in becoming team members and fully grasping the concept of teamwork. Secatore (1997) warns that the practice of the boot camp approach to orientation, where new graduates are subjected to all manner of stressful experiences to evaluate the extent to which they have what it takes to become one of the ward team, can be damaging and impact negatively on competence development. Goh and Watt (2003) noted in their study that "assimilation anxiety" which is the need to fit in, the need to prove themselves and colleagues that they are worthy of the term good nurses, affected participants competence development.

The overall mean for the 24 factors are 94.23 with a standard deviation of 14.760. The mean for the individual factors are outlined in table 14 to 16.

### **4.3 Summary of the findings**

In this section an overview of the findings in Section B and Section C of the research instrument will be given.

### **4.3.1 Competencies of the 7 Dimensions**

#### **Dimension 1: Clinical Care**

Newly qualified nurses are perceived as somewhat competent in most of the individual competencies in this dimension. On calculation of the mean scores for each dimension, the majority (n=17) of participants perceive newly qualified nurses as high in competency in this dimension.

#### **Dimension 2: Leadership**

Newly qualified nurses are perceived as somewhat competent in most of the individual competencies in this dimension. On calculating the mean scores for each dimension, the majority (n=17) of participants perceive newly qualified nurses as high in competency in this dimension.

#### **Dimension 3: Interpersonal Relation**

Newly qualified nurses are perceived as somewhat competent in four items and competent in the other four items in the individual competencies in this dimension. The majority (n=18) of the participants perceive newly qualified nurses to be high in competence in this dimension on calculation of the mean scores for each dimension.

#### **Dimension 4: Legal/Ethical**

Newly qualified nurses are perceived as somewhat competent in five items and competent in three items in this dimension in the individual competencies. On calculation of the mean score for each dimension the majority (n=19) of participants perceive newly qualified nurses as high in competence in this dimension.

#### **Dimension 5: Professional Development**

In the individual competencies the majority of newly qualified nurses are perceived as competent in only one item in this dimension. The mean score for this dimension indicate the majority (n=19) of participants perceive newly qualified nurses as high in competency.

### **Dimension 6: Teaching/Coaching**

Newly qualified nurses are perceived to be competent in only one item in the individual competencies in this dimension. The mean scores for this dimension verify that newly qualified nurses are perceived by the majority participants as low in competency in this dimension.

### **Dimension 7: Critical Thinking/Research Aptitude**

In the individual competencies the majority of newly qualified nurses are perceived as not competent in this dimension. The mean scores verify that the majority of participants perceive newly qualified nurses as low in competency in this dimension.

The total mean score for all 55 competencies were 174.71 with a standard deviation of 39.776. indicating overall high competency. However, both the teaching/coaching and the critical thinking/research aptitude dimension was perceived as low in competency in newly qualified nurses.

## **4.3.2 Factors Influencing Competency**

### **Experience in nursing**

The findings indicate that in both items under this factor the majority of the participants agree that experience in nursing influence competency.

### **Learning opportunities**

The findings indicate that the majority of participants agree that learning opportunities influence competency especially time for reflexion was perceived by 60% of the participants as influencing competency.

### **Personal characteristics**

The findings indicate that eagerness to learn (47%) and having a positive attitude (50%) was strongly agreed to by the participants. The majority also agree that activities that increase abilities and openness to criticism influence competency.

**Environment**

The findings indicate that all items under this factor were agreed by the majority of the participants to have an influence on competency. These included short placements, a conducive environment, up to date with technology and time to consolidate knowledge.

**Motivation**

The findings indicate that participants strongly agree that salary (32%) and confidence (43%) influence competency Patient satisfaction (34%) and accepting responsibility (37%) was agreed upon by the participants to influence competency.

**Confidence**

The findings indicate that (50%) of the participants agree that confidence influence competency.

**Expectation placed on nurses by themselves and others**

The findings indicate that the majority of the participants agree that exposure to skill (40%) and confidence in their abilities (50%) influence competency.

**Knowledge supporting actions**

The findings indicate that most of the participants agree that sound theoretical knowledge and knowledge applied in practice influence competency.

**Effective preceptorship including both support and challenge**

The findings indicate that most of the participants agree that guidance and support (52%), consistency of preceptors (32%) and role overload of preceptors (32%) influence competency.

**Acceptance into the ward team**

The findings indicate that that most of the participants strongly agree that acceptance into the ward team (40%) influence competency

#### **4.4 Conclusion**

In this chapter the data analysis and research findings, using tables percentages and graphs, where possible. The findings were discussed in reference to the literature.

Chapter 5 concludes the study, briefly discusses its limitations and makes recommendations for practice and further research.

## CHAPTER 5

### CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter concludes the study summarizing the research process and findings, briefly discussing the limitations and making recommendations.

#### 5.2 The research process

Competency of newly qualified professional nurses has been questioned, which was confirmed by both anecdotal evidence from experienced professional nurses as well as literature. The overall aim was to determine what perceptions experienced professional nurses, in private hospitals, have of newly qualified nurses' competency as well as factors influencing competency.

The objectives were to determine:

- Professional nurses' perceptions of newly qualified nurse's competency in the seven dimensions in clinical care, leadership, interpersonal relation, legal/ethical practice, professional development, teaching-coaching, critical thinking and research aptitude.
- Factors that influence competency.

The research approach and design for this research was quantitative, exploratory and descriptive in order to understand the phenomenon being studied. The purpose was to gather new information and statistics and to describe their significance (Burns & Grove 2003).

The sample selected included 34 participants, using all –inclusive sampling, from three private hospitals belonging to the same group. The sampling was a census as all the professional nurses working with newly qualified nurses at three selected Life Healthcare hospitals were included in the study. The participants were chosen according to the following eligibility criteria:

- Be qualified professional nurses with five or more years clinical experience
- Be registered with the SANC
- Be employed on a full-time or sessional basis at the Life Healthcare hospitals
- Have worked with a newly qualified professional nurse in the past year from July 2010 to July 2011.

Data was collected using an existing 55-item peer evaluation instrument, namely the Competency Inventory for Registered Nurses (Section B) as well as 29 other questions which included (Section A and Section C) Modifications were made to the instrument by the researcher in consultation with a statistician and the research supervisors. The instrument was piloted by distributing it amongst 10 experienced professional nurses, who fit the criteria, but did not participate in the study. The questionnaires were hand delivered and personally collected by the researcher to maintain the ethical principles discussed. Furthermore the researcher protected the information gathered by being the only one with access to a secret password.

### **5.3 Findings**

The study aimed to identify experienced professional nurses' perceptions of newly qualified nurses' competency with reference to the 5-item Competency Inventory for Registered Nurses as well as factors influencing competency. Descriptive analysis was mainly used through frequencies, tables, proportions and percentages data regarding competencies and factors. This report will make suggestions for improving support with regard to the integration of theory and practice as well as strategies to assist the institutions to improve competence development by the identified factors influencing competency. This study should contribute to professional nurses' awareness of what can be reasonably expected from newly qualified nurses when they enter the profession. The findings should facilitate in implementing measures that will assist their transition from student to qualified professional nurse to be a positive experience.

The researcher's conclusions were based on the objectives and the following research questions (see chapter 1).

**How do professional nurses' perceive newly qualified nurse's competency in clinical care, leadership, interpersonal relation, legal/ethical practice, professional development, teaching/coaching, critical thinking and research aptitude?**

**Clinical Care**

Although newly qualified nurses are perceived as somewhat competent in six items and competent in four items in clinical care, the calculation of the mean scores for this dimension indicate that the participants perceive them as high in competence in this dimension.

**Leadership**

Newly qualified nurses are perceived as competent in one item and somewhat competent in all the other items in the leadership dimension, but the mean scores indicate that the participants perceive them as high in competence in this dimension.

**Interpersonal Relation**

Newly qualified nurses are perceived as somewhat competent in four items and competent in the other four items in the interpersonal dimension. The mean scores indicate that the participants perceive them as high in competency in interpersonal relation.

**Legal/Ethical**

Newly qualified nurses are perceived as somewhat competent in five items and competent in three items in the legal/ethical dimension. The mean scores indicate that the participants perceive them as high in competency in this dimension.

**Professional Development**

The participants perceived newly qualified nurses as somewhat competent in five items and competent in one item in this dimension. The mean scores indicate that the participants perceive them as high in competency in professional development.



### Teaching/Coaching

The participants perceive newly qualified nurses as competent in one item in this dimension. The mean scores indicate that they are perceived as low in competency in teaching and coaching.

### Critical thinking/Research aptitude

The participants perceived newly qualified nurses as somewhat competent and slightly competent in critical thinking and research aptitude. The mean scores indicate that they are perceived as low in competency in this dimension.

### **What are professional nurses' perceptions of factors influencing competency?**

Ten factors influencing competency were identified from the literature for the purpose of this study. The participants perceived that all of these factors influence competency.

## **5.4 Recommendations**

Based on these findings, the researcher makes the following recommendations for institutional support and future research.

### **Institutional support**

Focus needs to be reiterated towards improving newly qualified nurses' critical thinking skills. Students should be made aware of the importance of developing their critical thinking skills as it is an important aspect in the integration of theory and practice once they are practicing as qualified professional nurses.

Strategies such as case study method, role play, cooperative learning strategies (group learning situations) and thought provoking visual aids (posting signs) in the classroom, will assist with improving critical thinking skills.

Ongoing critical thinking skills workshops in the clinical setting, not only for newly qualified nurses, need to be considered.

Create opportunities to involve newly qualified nurses in teaching and coaching of not only patients and families, but their peers and colleagues. Case presentations

can be presented by nursing staff as part of in service training involving all clinical units.

Educating all staff on how to nurture and support newly qualified nurses.

Provide newly qualified nurses with consistent preceptors.

Provide opportunities for newly qualified nurses to become involved in activities that would increase their abilities.

Develop orientation programs that provide relevant information and that are focused on ensuring competencies in the clinical area.

Maintain realistic expectations of newly qualified nurses' competency after completion of their training and assist them in competence development by continuous education programmes.

### **Future research**

Further research should be conducted in the following topics:

A qualitative study of factors described by nurses that influence their competence development

How nurses self-perception of their competence are related to their performance in practice.

Explore the concept competency using the Competency Inventory for Registered Nurses on different categories of nurses.

## **5.5 Limitations**

The researcher found the following limitations to the study:

- The study was conducted at three private hospitals in the Western Cape metropole. Information was obtained from experienced professional nurses working in very busy units. The researcher encountered obstacles on collection of the research questionnaires. Instead of two weeks, the researcher only received most of the questionnaires after five weeks.
- The sample size of this study is small thus the findings must be treated with caution.
- Generalization will only be possible for the private hospitals included in the study.

- Although the research questionnaire was structured with closed questions, its length may have contributed to the participants not completing it on time.

## **5.6 Conclusion**

The study explored and described professional nurses' perception of newly qualified nurses' competency and factors influencing competency. Perception of a high overall competency in the seven dimensions of competency was found, however the teaching/coaching- and critical thinking and research aptitude dimensions was perceived as low in competency by the participants. The ten factors were all perceived as influencing competency.

Recommendations were made with regard to institutional support and future research.

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