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(E)valuating the pre-hospital learning environment by students enrolled for an emergency nursing programme

by

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submitted in accordance with the requirements

for the degree

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(Clinical)

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DECLARATION

Student number: 29664510

I, Sonett van Wyk, hereby declare that this research study entitled **(E)valuating the pre-hospital learning environment by students enrolled for an emergency nursing programme** is my own work and that all sources consulted or quoted have been indicated and acknowledged by means of complete references. I further declare that this work has not been submitted for any other degree at any other institution.

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Sonett van Wyk Date

DEDICATION

I dedicate this research study to all emergency nurse practitioners working in emergency units who welcome a challenge, are capable of handling the unexpected because they are disinclined to routine, are versatile, flexible and adaptable, expert assessors and analysts, and who love to detect, organise and fix problems. Being endowed with these talents and characteristics and being committed and dedicated to the profession as well as the patients, it is no wonder that you accepted the challenge to resolve the pernicious situation experienced in your unit.

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Other researchers have contributed in many ways to data collection and analysis, and have freely shared their precious findings. I wish to convey my heartfelt appreciation to the following persons for their invaluable contribution to this study:

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- Most of all, my Heavenly Father, for granting me the strength and courage to complete this study.

ABSTRACT

Clinical learning is regarded as a vital component in nursing programmes and students need to work in various clinical environments. In the emergency nursing programme presented at a tertiary nursing education institution, the pre-hospital environment is used as a clinical learning environment in which students rotate for approximately eight weeks. The clinical experience that they gain may assist in them developing the necessary knowledge and skills. It also assists in theory-practice correlation.

The purpose of this study was to evaluate the value of the pre-hospital environment utilised as part of the clinical learning component of the emergency nursing programme. A qualitative approach was utilised since the researcher wanted to study a particular phenomenon, namely the pre-hospital learning environment. Therefore, the research design was a descriptive design whereby the researcher could describe the real life situation in the pre-hospital learning environment as experienced by the emergency nurse students.

The target population for the study was emergency nurses who had already obtained their qualification as a registered emergency nurse, as well as emergency nurse students that had completed their rotational period in the pre-hospital learning environment. For the purpose of this study the identified sample consisted of students enrolled for the emergency nursing programme at a tertiary nursing education institution in Gauteng. The sample was adequate to provide the researcher with sufficient in-depth data and was also representative of the accessible population. The final sample size was 45 emergency nurse students who had completed the pre-hospital rotational period between 2008 and 2011.

Data collection was done by means of Appreciative Inquiry, a method used that not only focuses on the positive, but which is also a stimulating way of looking at organisational change. Stories (narratives) were shared by the emergency nurse students pertaining to their real life experiences. Initially stories were shared in writing on an Appreciative

Inquiry interview schedule. For the purpose of data saturation, individual Appreciative interviews were conducted by an independent interviewer, utilising the Appreciative Inquiry interview schedule as a guide. Data analysis was conducted by the interviewer, supervisors and an independent data analyser to ensure trustworthiness.

Four themes were identified, namely clinical exposure, competencies, team work and future recommendations. From the data analysis and the four themes recommendations could be made with regard to programme refinement.

Key words

(E)valuate, clinical learning experience, clinical learning environment, emergency nursing programme, student, and pre-hospital environment

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CHAPTER 1
ORIENTATION TO THE STUDY

"A man is but the product of his thoughts what he thinks, he becomes."

- **Mohandas Karamchand Gandhi** -

1.1 INTRODUCTION

Clinical learning is a vital component of nursing programmes as it provides the students with essential opportunities to develop specific competencies in the nursing practice. In South Africa registered professional nurses working in the emergency environment can enrol for a post-basic training programme, 'Medical and Surgical: Emergency Nursing', presented at tertiary institutions (Brysiewicz & Bruce 2008:129). This emergency nursing programme was approved by the South African Nursing Council (SANC) in 1997 (R212 1978 as amended by R74 1997).

To gain appropriate clinical experience, knowledge and skills during the emergency nursing programme, it is essential for the students to work in various clinical learning environments. The clinical experience gained during exposure to different clinical learning environments may assist the emergency nurse student in the development of the necessary knowledge and skills (Chesser-Smyth 2005:320; Melby 2000:638). In addition, the planned clinical placement may enhance the student's ability to integrate theory with practice which is consistent with the views of Edwards et al. (2004:249) and Jackson and Mannix (2001:276). Heyns (2009, line 2) explained to the researcher that the clinical learning environments utilised for placement of students enrolled for the emergency nursing programme include the hospital environment (emergency unit, theatre and critical care unit) as well as the pre-hospital environment.

As mentioned by Chesser-Smyth (2005:320) and Melby (2000:638), gaining vital knowledge and skills will enable the student nurse to work in the pre-hospital environment. However, personal communication with Heyns revealed that the rotation of students through the pre-hospital environment during the emergency nursing programme proved to be a controversial issue as specifically private hospital groups regard it as costly and unnecessary (Heyns, 2009).

This study focused on the overall experiences of students enrolled for the emergency nursing programme regarding the possible value that their exposure to the utilisation of the pre-hospital environment as a clinical learning environment added to their personal and professional development. Bearing in mind that the contentious issue here was that their absence from their emergency units had financial implications, especially for the private hospital companies, the aim of the study was to evaluate the experiences of emergency nurse students in order to establish how advantageous and important their exposure to the pre-hospital environment was.

1.2 BACKGROUND TO THE STUDY

This study is focussing on the clinical learning environment and the emergency nursing programme. Each of these focus points will be discussed in section 1.2.1 to 1.2.3.

1.2.1 THE CLINICAL LEARNING ENVIRONMENT

Meyer, Naudé and van Niekerk (2004:105) observe it is essential to remember that the clinical learning environment should make provision for all health care professionals and stakeholders that enter this environment. The effectiveness of the clinical environment as a learning environment depends on the interaction between the members of the multidisciplinary team which includes the emergency nurse student, the various categories of paramedics, the patients, and the facilitator and/or lecturer. A learning environment conducive to learning should incorporate planned learning opportunities and purposive exposure to various clinical situations to enhance the students' development; in other words, the clinical learning environment has to be rich in learning opportunities (Meyer & van Niekerk 2008:65). In fact, Meyer et al. (2004:81) perceive that the learning environment indeed consists of ample learning opportunities; moreover, they identify mutual trust and respect, support and collaboration as some characteristics of the clinical learning environment that contributes to learning. The authors further reason that a therapeutic clinical learning environment may encourage students to ask questions frankly and be more enquiring; it may also evoke in them the desire to become more knowledgeable, to develop an attitude of wanting to learn. Therefore the views of Meyer et al. may also apply to the pre-hospital learning environment.

Suserud and Haljamäe (1997:20) note it should be recognised that special training within the pre-hospital environment is of great value. Midgley (2006:339) opines that clinical placement should be regarded as an essential, irreplaceable resource to prepare students

for their professional role. The author's stance on this issue is quite valid, since clinical placement involves the student to render care of patients of various ages, make accurate assessments and exposes them to the execution of a nursing regime. On the whole, it seems as if there is a great need for effective training in the clinical environment. Since Meyer et al. (2004:104) posit that the clinical learning environment serves as a reference framework for unit managers, it can be extrapolated that it can also serve as a reference framework for the students in need of training, since they need a frame of reference in order to facilitate clinical learning.

According to Gardner, Gardner and Proctor (2004:151), the clinical learning environment is essential to clinical learning. The clinical learning environment needs to have an effective humanistic learning climate that is supportive and caring in order to provide important learning opportunities (Lee & French 1997:460; Meyer & van Niekerk 2008:107). Chan's (2001:457) contribution is that a positive atmosphere contributes to a positive clinical learning environment, while Manias and Aitken (2003:52) add that the clinical learning environment has been acknowledged as an energetic learning community. Edwards et al. (2004:249) believe clinical placements play a pivotal role in developing the students' competence and organisational skills while preparing them for practice. The abovementioned literature supports the importance for the students to gain as much experience as possible in the pre-hospital environment *and* to apply the knowledge and skills they have gained. Le Clerc (2005:103) supports this statement while at the same time emphasising that the clinical facilitator assists to arrange suitable clinical placement for the student in order to gain the necessary experience.

1.2.1.1 Gaining knowledge and skills

Once students realise the value of knowledge, and the way it integrates within the professional practice, learning is promoted (Meyer & van Niekerk 2008:170). According to Meyer et al. (2004:112), students must be involved in their own learning where obtaining the necessary knowledge and skills are concerned. An example would be preparing for the pre-hospital environment by studying the paramedics' protocols. This will enable the student to be practically involved; thus he or she will be able to integrate theory and practice.

During placements students are expected to develop specific knowledge, skills and competencies pertinent to the clinical environment (Chan 2002b:517-518). The purpose of clinical placement is to provide the students with supervised opportunities as they

apply and develop their theoretical knowledge. Clinical placement can provide students with an opportunity to combine various skills to develop their competencies when applying their gained knowledge and skills (Chan, 2001:448; Häggman-Laitila et al., 2007:382). On the whole, the expansion of the students' knowledge thus appears to be of great importance as affirmed by Melby (2000:641).

According to Chesser-Smyth (2005:325), a significant element in providing holistic care to a patient is the acquisition of clinical skills. Cole and Ramirez (1997:112) state emergency nurses within the speciality units require knowledge, skills and experience. When it comes to acquiring knowledge and skills, the placement area is perceived as the most influential component (Chan 2001:447); in the context of this study it was clinical placement in the pre-hospital environment.

1.2.1.2 Experiential learning

In the opinion of Jarvis, Holford and Griffin (2003:67) all learning is regarded as experiential. According to Jarvis (2004:83), every person's learning experience is unique; experiential learning is regarded as learning from primary experience (Jarvis 2004:101). The experience gained by the students is vital for the production and maintenance of qualified nurses (Pearcey & Elliot 2004:387). Practice-based learning is important to educational programmes (Carlisle, Calman & Ibbotson 2009:715). The authors provide evidence that placement needs must have structures to support learning and provide for experiential learning. Furthermore, placement helps students to develop professional confidence which is based on their clinical learning experiences (Crooks et al. 2005:362). It is also a way to increase the students' professional competence (Papp, Markkanen & von Bonsdorff 2003:262). A reported benefit of experiential learning includes nurses being more knowledgeable (Bahn 2007:720).

In a study conducted by Melby (2001:728) it was found that placement of nursing students within the pre-hospital environment facilitates experiential learning. Experiential learning is supported through an appropriate background for clinical practice (Papp et al. 2003:265). Experience within a clinical learning environment is regarded as essential for safe practice (Field 2002:74). It is therefore vital for students to be placed in various clinical learning environments, including the pre-hospital environment, to ensure that they become knowledgeable and skilled to be safe nurse practitioners. In a study conducted by Lewin (2007:245) it was found that the monitoring of the quality of clinical placements can enhance the students' clinical learning experience.

1.2.1.3 Theory-practice correlation

The emergency programme consists of a theoretical and a practical component. Theoretical knowledge is addressed by the lecturer at the tertiary nursing education institution, whereas the practical component is addressed by the clinical facilitator by means of the clinical accompaniment of the student in the practice. Applying theory to practice not only benefits the delivery of nursing care, but also aids in the recovery of patients. Therefore, the students' critical-analytical thinking to problem-solving is enhanced (Meyer et al. 2004:95). According to these authors (2004:95), theoretical knowledge is of the utmost importance to patient care and a good theoretical background is regarded as the foundation for all practicing. Theory and practice are not separate entities; it is a complete and singular entity. Theory–practice correlation may assist to lay the groundwork to render scientific nursing care (Meyer, Naudé & van Niekerk 2004:111).

Sendir and Acaroglu (2008:737) found that learning experience within the clinical field may help with the correlation between theory and practice. Clinical placements can therefore provide students with the opportunity to apply theory to practice. This is supported by Tiwari et al. (2005:300) since the authors are of the opinion that nurses need to have firm theoretical knowledge that is relevant to the clinical practice. In a historical study done by Bradshaw (2000:327) nurses were taught through practical demonstration, thereby ensuring the relevance of the correlation of theory with practice. The emergency nursing programme consists of a theoretical and a clinical component.

1.2.2 EMERGENCY NURSING PROGRAMME

At the specific tertiary nursing education institution in Gauteng where this study was conducted, the theoretical component at the time when the study was done was conducted is planned according to a fixed schedule and consisted of approximately four hours per week for a total period of 28 academic weeks. The clinical component, facilitated through clinical accompaniment by a clinical facilitator, took place in the clinical learning environment. The various clinical learning environments utilised during the emergency nursing programme consisted of the pre-hospital environment externally, and the emergency unit, critical care unit and operating theatre internally. Research pertaining to the classroom learning environment has been well established over the past 30 years (Chan 2004:9; Chan 2002a:69). However, minimal studies have been

conducted regarding the clinical learning environment (Baglin & Rugg 2010:145; Chan 2002a:69).

Verbal communication with Heyns (2009), senior lecturer in the Department of Nursing Science at a specific tertiary nursing education institution in Gauteng, revealed that clinical learning is regarded as a crucial component in the curriculum of the emergency nursing programme since it provides students with the opportunity to combine cognitive, psychomotor and affective skills; it furthermore enhances the correlation between theory and practice. This view is consistent with that of Meyer et al. (2004:111) who concur that students need clinical accompaniment within the clinical environment in order to ensure adequate theory practice correlation. Clinical placement provides ample opportunities where role models can be observed, and where one can practice by oneself and reflect on what was seen, heard and done (Thorell-Ekstrand & Bjorvell 1995:198). Hosoda (2006:481) and Chan (2004:9) confirm that the clinical environment needs to be supportive of this learning process because it provides a unique opportunity to prepare and empower the student in becoming a competent emergency nurse.

According to Heyns (personal communication 2009), the pre-hospital clinical placement period is approximately eight weeks with a minimum of two 12-hour-shifts per week. In the opinion of Heyns (personal communication, 2009) and Chan (2004:9), the time should be utilised effectively. Therefore, students need to have the most positive and conducive clinical learning experience possible. The pre-hospital environment is, however, regarded as a problematic environment for hospital personnel, mainly due to the unfamiliarity of the surroundings and the limited available resources (Suserud & Haljamäe 1997:147). This statement from Suserud and Haljamäe may therefore also apply to the emergency nurse students clinical placement within the pre-hospital environment. In a study conducted by Sendir and Acaroglu (2008:737) it was found that, in general, students reported that stress played a pivotal role during their clinical placement.

Stressors experienced by students in the clinical learning environment included the unfamiliar environment, the fear of making mistakes and injuring people combined with the fact that students had inadequate knowledge and skills. Also, Baglin and Rugg (2010:146) found that students' stressors included inadequate mentorship support as well as a fear of making mistakes. Svensson and Fridlund (2008:37-38) found in their study that nurses working with ambulance personnel experienced feelings of being inadequate and this made them anxious. In a study conducted in Australia by Taylor et

al. (1999:101) students reflected that they felt ill-prepared and overwhelmed when working in the clinical environment. Therefore, this statement may also apply to the pre-hospital environment as a clinical learning environment. It is therefore not unnatural or surprising that students may feel vulnerable in the clinical environment (Campbell et al. 1994:1128; Chan 2004:2). Chesser-Smyth (2005:324) observes that, in general, students without previous experience usually demonstrate a high degree of apprehension and fear when placed in a new and unknown environment. Again, this may apply to the clinical learning environment.

The researcher worked as a clinical facilitator involved in the education and training of students in a private hospital group at the time the study was conducted. Students verbalised to the researcher that they experienced various stressors when placed in the pre-hospital environment; these included feelings of being ill prepared, inadequate, vulnerable and anxious due to the unfamiliarity of the surroundings. This is consistent with the findings in the studies conducted by Svensson and Fridlund (2008:37-38), Taylor et al. (1999:101) and Suserud and Haljamäe (1997:147) as mentioned previously. On the other hand, positive experiences such as learning various skills were also pointed out by the students: for example, they acquired psychomotor skills needed for the diagnosis and interventions of life-threatening injuries. The learned observational skills needed to aid in the differential diagnosis of patients based on the mechanism of injury. These are skills which can be transferred to the emergency unit when admitting patients from the pre-hospital environment.

This made the researcher realise that the value of placement with the pre-hospital learning environment should be evaluated.

1.3 PROBLEM STATEMENT

Students enrolled for the emergency nursing programme at the specific tertiary nursing education institution in Gauteng, South Africa, are required to work in the pre-hospital environment as part of the clinical placement to enhance clinical learning. The pre-hospital environment is regarded as an important clinical learning environment since it enables students to gain specific experiences such as mechanisms of injury, knowledge and skills of the ambulance personnel, initial management of patients on the scene, and challenges of patient management in the pre-hospital environment which cannot be gained in the hospital environment.

But, as indicated in section 1.2 BACKGROUND TO THE STUDY, rotating through the pre-hospital environment can be stressful; it can provoke feelings of anxiety, of feeling inadequate and ill-prepared in the students. This may be due to fear of the unknown, to them being scared of making mistakes, of injuring people or them having limited knowledge and skills as suggested by Sendir and Acaroglu (2008:737).

In order to maximise the students' clinical learning experience, the researcher believed a need existed to evaluate students' experiences in the pre-hospital learning environment. Recommendations could then be made in accordance with the findings to optimise these experiences and work towards obtaining educational excellence in this unique environment. In addition, the value of the pre-hospital environment as a learning environment should be evaluated.

1.4 AIM AND OBJECTIVES OF THE STUDY

The overall aim of this study was to utilise Appreciative Inquiry to evaluate the pre-hospital environment as a clinical learning environment by the emergency nurse students as part of the clinical learning component of the emergency nursing programme. In order to achieve this aim it was necessary to determine certain objectives regarding the pre-hospital environment (view Table 1.1).

Table 1.1: Objectives according to the 5D-Cycle

Objective	Description
Objective 1	Discover ***"what is"*** the best experiences as viewed by the students who were enrolled for the emergency nurse programme, related to the pre-hospital environment
Objective 2	Dream ***"what could be"*** which related to the ideal pre-hospital learning environment
Objective 3	Design ***"what should be"*** recommended within the pre-hospital environment to enhance the clinical learning experiences of the students
Objective 4	Deliver ***"what will be"*** the strategies that can be implemented by the nurse educators to enhance the pre-hospital learning environment

1.5 SIGNIFICANCE OF THE STUDY

The true value of clinical placement in the pre-hospital environment as perceived by students enrolled for the emergency nursing programme is still unclear. This study explored the clinical learning experiences of the students during clinical placement in the pre-hospital learning environment. Based on the findings of the study, recommendations were made with regard to programme refinement.

By utilising Appreciative Inquiry as a positive approach, programme evaluation can be done in a positive manner in order to lead towards programme refinement. In addition, this may lead enhanced nursing educational practice.

1.6 PARADIGM

A paradigm is defined as *"a typical example, pattern or model of something"* (*Oxford paperback dictionary & thesaurus* 2007). According to Polit and Beck (2008:761), a paradigm is *"a way of looking at natural phenomena that encompasses a set of philosophical assumptions and that guides one's approach to inquiry"*.

The essential core of constructivism is students constructing their own knowledge and meaning from experience. Murphy (1997, p.3) states learning is a process where meaningful representations are constructed; when one makes sense of one's experimental world. The paradigm of constructivism establishes that learning emphasises the process, and not the product. Constructivism is referred to as a naturalistic paradigm (Polit & Beck 2008:759). They define a naturalistic paradigm as "*to understand how individuals construct reality within their context".* McHenry et al. (2005, p.1) opine that constructivism is a learning theory as well as a learning process which is effective for developing professional competencies. Furthermore, it is the stance of these authors that learning is founded on the grounds of reflection on own experience, so that one can formulate one's own understanding of one's experiences. In other words, learning is the process of adapting one's mental models so as to accommodate any new experiences.

In this study, the researcher attempted to understand emergency nurse students' clinical learning experience within the context of the pre-hospital environment. By means of constructivism, it was envisaged that new knowledge could be utilised to construct recommendations for the emergency nurse programme refinement.

1.7 ASSUMPTIONS

Since Appreciative Inquiry was utilised, the assumptions thereof were applicable to this study. According to Hammond (1998:20-21), there are eight assumptions that underpin Appreciative Inquiry. The eight assumptions were all relevant to this study, namely:

- Within every nursing programme there is something that works;
- The focus becomes reality;
- Reality is created in a moment, and there are several realities;
- The asking of questions from students will influence the students in some way;
- Students have more confidence and comfort to journey to the future (the unknown) when parts of the past (known) are carried forward;
- If parts of the past are carried forward, these should be what is best from the past;
- Differences has to be valued;
- Our reality is created by the language we use.

The abovementioned assumptions are based on eight core principles on which Appreciative Inquiry is based as set out by Preskill and Catsambas (2006:10). The eight core principles include: (i) the constructionist principle, (ii) the principle of simultaneity, (iii) the poetic principle, (iv) the anticipatory principle, (v) the positive principle, (vi) the wholeness principle, (vii) the enactment principle, and (viii) the free choice principle. They are briefly tabulated in Table 1.2, while an in-depth discussion thereof as the core of Appreciative Inquiry's theoretical foundation towards positive organisational change follows in Chapter 2.

Table 1.2: Principles of Appreciative Inquiry

Principle	Description
The constructionist principle	Social knowledge and organisational destiny is interwoven. In essence thus, this means that how one knows and what one does is closely interwoven.
The principle of simultaneity	Inquiry and change are not strictly separate moments; in fact, both inquiry and change should be simultaneous. Inquiry is regarded as an intervention In the opinion of these authors data become the stories out of which the future is constructed.
The poetic principle	A metaphor to describe human organisations as an open book; the past, present and future are infinite sources of inspiration, learning and interpretation. In other words, one can study practically any topic related to human experience.

Principle	Description
The anticipatory principle	What one does today is guided by images of the future. Collective imagination and dialogue with regard to the future is a very valuable resource to generate constructive change or improvement.
The positive principle	A more concrete principle and indicates the drive towards change requires great amounts of positive affect and social bonding, attitudes and the joy of creating.
The wholeness principle	The best within people and organisations is brought out. According to these authors, creativity is stimulated through the involvement of all stakeholders and therefore the whole story needs to be understood and one needs to engage with the whole system.
The enactment principle	One self must be the change that one wishes to see positive change can therefore only occur once one can envision the ideal future.
The free choice principle	People are allowed to perform at their best; they are more committed if they have the freedom to make choices with regard to their contribution.

Adapted from: Cooperrider et al. 2005 Bushe & Kassam 2005 and Preskill & Catsambas 2006

Table 1.2 summarizes the eight principles of Appreciative Inquiry. These principles will be discussed in-depth in Chapter 2, section 2.5.

1.8 KEY CONCEPTS

The key concepts are clarified in order to prevent misunderstanding and to clearly state the meaning of each concept throughout the study.

1.8.1 (E)VALUATE

Evaluate is defined as "to calculate or judge the value or degree of ..." (Longman dictionary of contemporary English 1987). To ***evaluate*** can be viewed as a process whereby feedback is provided to practitioners as well as members of an organisation regarding the progress and impact of certain interventions taken (Cummings & Worley 2009:189). Furthermore, the authors are of the opinion that to evaluate is done post implementation of an intervention. ***Valuate*** is defined as "to place a value on; appraise" (http://www.merriam-webster.com/dictionary/valuate).

For the purpose of this study ***e(valuate)*** will describe a process that judges the value of a particular phenomenon in order to provide feedback after the implementation of an intervention.

1.8.2 CLINICAL LEARNING EXPERIENCE

Clinical is defined as "*relating to the observation and treatment of patients"* (*Oxford paperback dictionary & thesaurus* 2007). Furthermore, ***clinical*** work refers to the requirement of '*understanding of complex inter-relationships between professional and personal issues…*' (Hughes & Youngson, 2009:30). ***Learning*** refers to "*knowledge or skills gained by studying" (Oxford paperback dictionary & Thesaurus* 2007). According to Zull (2002:xiv) ***learning*** refers to change that occurs through various routes leading to different outcomes. The author furthermore is of the opinion that ***learning*** is a physical activity (2002:5) that depends on experience (2002:18). ***Experience*** is the knowledge and skill that is gained over time (*Oxford paperback dictionary & thesaurus* 2007). Joseph refers to ***experience*** as a connection (2010:17).

For the purpose of this study, ***clinical learning experience*** will mean the understanding of specific knowledge and skills gained through connection by students enrolled for the emergency nursing programme at a specific tertiary nursing education institution in Gauteng with regard to the pre-hospital environment.

1.8.3 CLINICAL LEARNING ENVIRONMENT

An ***environment*** is defined as "*the surroundings in which a person … operates*" (*Oxford paperback dictionary & Thesaurus 2007*). ***Environment*** refers to circumstances surrounding people (Palmer, 1995:13).

The ***clinical learning environment*** is viewed as the environment where students perform skills related to the needs of patients by providing physical, psychological, spiritual and social support – thus a holistic approach – to patients in order to promote and maintain safe, effective patient care (Carlson, Kotzé & van Rooyen 2003:32).

For the purpose of this study the ***clinical learning environment*** will relate to the pre-hospital environment where students were placed during the emergency nursing programme. (view Chapter 1, section 1.1, paragraph 2).

1.8.4 EMERGENCY NURSING PROGRAMME

The 'Medical and Surgical Nursing: Emergency Nursing' programme is considered as a part of the approved post-basic programmes listed by the SANC (1997:1). A ***programme*** is defined by the SANC "*a programme of education and training approved by the council presented by an approved nursing school … which leads to a clinical nursing qualification … that can be registered as an additional qualification*" (SANC 1997:1). ***Programme*** is defined as *'a collection of inter-dependent projects managed in a coordinated manner that together will provide the desired outcome'* (Young, 2010:16). Throughout the study this programme will be referred to as the ***emergency nursing programme.***

1.8.5 STUDENT(S)

A ***student*** refers to "*a person studying at a university or college*" (*Oxford paperback dictionary & thesaurus* 2007). ***Student*** nurse can refer to *'a person accepted for training leading to a registered qualification'* (Rosenblatt & Lewis: 1997:250).

For the purpose of this study the concept ***student(s)*** will refer to a registered nurse enrolled for the emergency nursing programme (view Section 6.2.3) at a specific tertiary nursing education institution in Gauteng.

1.8.6 PRE-HOSPITAL ENVIRONMENT

The *Merriam-Webster's medical dictionary* (2009) defines ***pre-hospital*** as: "*occurring before or during transportation (as of a trauma victim) to a hospital". **Pre-hospital*** refers to *'the provision of skilled medical help at the scene of an accident or medical emergency or while in transit to a hospital'* (Collier, Longmore & Brinsden, 2006:790).

For the purpose of this study *the **pre-hospital environment*** will be considered as the physical and social conditions, forces and stimuli that can have an effect on the student before or during transportation of a patient to a hospital under direct supervision of a paramedic.

1.9 RESEARCH DESIGN AND METHOD

Polit and Beck (2008:765) defines a research design as "*the overall plan for addressing a research question* ...". The authors further define research methods as "*the techniques*

used to structure a study and to gather and analyse information in a systematic fashion". Burns and Grove (2005:211) define the research methodology as "*the entire strategy for the study*" from beginning to end. The research methodology refers to both the framework of theories as well as the principles on which methods and procedures are based (Holloway & Wheeler 2002:287; Holloway & Wheeler 2010:322).

1.9.1 RESEARCH DESIGN

A research design is regarded as a blueprint to conduct a study with; it maximises the control over factors that may hinder its validity (Burns & Grove 2005:211). According to these authors, the research design is the end result of a series of decisions made by the researcher with regard to how the study will be implemented. The research design assists with the planning direction for the implementation of the study. The current study was descriptive in nature.

1.9.1.1 Explorative and Descriptive design

According to Burns and Grove (2005:734), a descriptive design is useful in identifying an interesting phenomenon as well as the variables within this phenomenon. A descriptive design can assist in the development of conceptual and operational definitions of the identified variables. Descriptive designs are a way to discover new meaning, describe what exists, determine the frequency of an occurrence, and categorise of information (Burns & Grove 2005:26).

Brink (2006:102) explains that descriptive designs are used when more information is required with regard to a specific field. It provides an image of the phenomenon as it occurs naturally. Polit and Beck (2008:752) define descriptive designs as "*research that has as its main objective the accurate portrayal of the characteristics of situations … with which certain phenomena occur*". Descriptive designs also assist in the description of feelings (Polit & Beck 2008:228).

Burns and Grove (2005:357) describes that explorative designs aim to increase the knowledge of the field of study. An exploratory study also begins with a phenomenon of interest (Polit & Beck, 2008:20), but investigates the full nature of the phenomenon, related factors and how it manifests itself. An explorative design will give the researcher access to students, enrolled for the emergency nursing programme, with experiences

regarding the clinical learning environment, to participate in the study. In addition, this type of design may also ensure that the researcher and students are able to acquire new insights into the full nature of the clinical learning experience of the students. The researcher will aim to establish the facts, to gather new data and to determine whether there are any interesting patterns arising from the collected data (Mouton, 1996:103).

To explore and describe a phenomenon in real life situations is the purpose of a descriptive study. It assists in the generation of new knowledge with regard to concepts or topics about which limited or no research has been done (Burns & Grove 2005:44). It also has the purpose to provide a reflection of situations as they naturally occur (Burns & Grove 2005:232). In this study, the phenomenon under study was the students' experiences within a real life situation, namely the pre-hospital environment. The experiences that the researcher attempted to identify from the study were of both a personal and a professional nature.

In this study the researcher attempted to understand, explore and describe the pre-hospital learning environment and how it impacted on the students' learning experience. A detailed, more in-depth description of the research design utilised in this study is discussed in Chapter 3.

1.9.2 RESEARCH METHODS

Research methods are defined as *"the steps, procedures and strategies for gathering and analyzing data in a study"* (Polit & Beck 2008:758). In addition, research methods are "*the techniques used to structure a study and to gather and analyse information in a systematic fashion"* (Polit & Beck 2008:765). For the purpose of this study the research methods included the target population, sampling, sample, data collection, data analysis and strategies to establish trustworthiness. The research methods are summarised in Table 1.3 and are discussed in more detail in Chapter 3.

Table 1.3: Summary of the research methods utilised

Population and sampling	Data Collection	Data analysis	Establishing trustworthiness
Target Population: Emergency nurses that obtained their qualification after completion of the emergency nurse programme (*view section 3.3.1*).	Appreciative Inquiry interview schedules were utilised (*view section 3.3.4*) Appreciative inter-views were utilised for data saturation (*view section 3.3.4.3*).	Content analysis was utilised, making use of the data analysis principles of Tesch (*view section 3.3.4*).	**Strategies utilised included:** Credibility Dependability Confirmability Transferability Authenticity (*view section 3.4).*
Sampling: Emergency nurse students who had successfully completed the emergency nurse programme and or the rotational period in the pre-hospital environment at a tertiary nursing education institution in Gauteng (*view section3.3.2).* Purposive sampling was utilised.	As above	As above	As above
Sample size: The sample was 45. Data saturation was achieved (*view section 3.3.3*). A detailed, description of the research methods utilised in this study is discussed in Chapter 3.			

1.10 ETHICAL CONSIDERATIONS

The ethical principles that need to be considered in a research study are as follows: (i) the principle of respect for persons, (ii) the principle of beneficence, and (iii) the principle of justice (Burns & Grove 2005:180). Included in the principle of respect for persons is the protection of human rights. These include (a) the right to self-termination, (b) the right to privacy, (c) the right to autonomy and self-confidentiality, (d) the right to fair treatment, and (e) the right to protect from discomfort and harm (Burns & Grove 2005:181). Since no patients were involved in the current study, the ethical considerations were relevant to the rights of the students as participants. The proposal was reviewed by Research Ethical Committee of the Faculty of Health Sciences (view Annexure B & C) at the specific tertiary nursing education institution in Gauteng to protect the ethical rights of the student participants. The ethical considerations utilised in this research are summarised in Table 1.4 and a detailed discussion follows in Chapter 3.

Table 1.4: Summary of the ethical considerations

Ethical consideration	Description
Informed consent	• The researcher obtained ***informed consent*** in writing from every student participant to ensure that the ethical aspect of this study was taken into consideration. (view to Annexure D & E).
Voluntary	• Participation in this research was completely ***voluntary***. This means the student participants could choose whether they wanted to participate in the study or not.
Right to self-determination	• All the student participants were assured they had the ***right to withdraw*** from the study at any time, should they wish to do so.
Right to privacy	• The students participating in this research knew exactly when and how information would be gathered. Without all participants ***consent*** or knowledge, no information was collected. (view to Annexure D & E).
Confidentiality	• The researcher answered any and all questions the student participants had with regard to this study. She also ensured that a high professional standard was maintained regarding all issues of ***confidentiality.***

Ethical consideration	Description
Anonymity	• It was attempted not to expose the participants to any circumstances that they might not have been prepared for. All data were treated with the greatest respect and no information could be linked to any of the student participants, thereby ensuring their ***anonymity***.

Adopted from: Burns & Grove 2005 and Pollit & Beck 2008

1.11 LIMITATIONS AND SCOPE

The aim of this research was evaluate the pre-hospital learning environment by students enrolled for the emergency nurse programme. The fact that only three tertiary institutions in South Africa provide training in emergency nursing could be considered as a limitation. Also, annually an average of 20 students are trained in emergency nursing at the specific university, in other words only about 80 students were trained in a four year timeframe from 2008 to 2011 when this study was done. But, because the study was aimed at programme refinement for a specific tertiary nursing education institution in Gauteng, neither of the abovementioned was regarded as limitations.

1.12 LAYOUT OF THE CHAPTERS

The layout of the chapters is presented in Table 1.5.

Table 1.5: Layout of chapters

CHAPTER	CHAPTER TITLE	CHAPTER DESCRIPTION
Chapter 1	Orientation to the study	This chapter presents an orientation to the entire study. It gives a brief introduction of the research design and methods that were utilised.
Chapter 2	An overview of Appreciative Inquiry	This chapter focused on Appreciative Inquiry as the conceptual framework utilised as the data collection technique.
Chapter 3	Research design and methods	An in-depth discussion regarding the research methodology utilised with specific reference to the research design, research method and process, actions taken to enhance trustworthiness of the study and the specific ethical considerations adhered to during the study.

CHAPTER	CHAPTER TITLE	CHAPTER DESCRIPTION
Chapter 4	Research findings and literature control	This chapter provides an in-depth overview of the research findings. A literature control that was conducted to support the research findings is included.
Chapter 5	Conclusion, limitations and recommendations	This chapter presents the conclusions drawn from the research findings. Additionally, recommendations are made to enhance the clinical learning experience of the students in the pre-hospital environment as well as for future research.

1.13 SUMMARY

In Chapter 1 an orientation to the study was provided by discussing the clinical learning environment as a vital component of emergency nursing programmes. Chapter 2 provides an in-depth discussion of Appreciative Inquiry, the approach that was utilised in this study. Appreciative Inquiry is discussed in terms of its historical background, the definition, its core principles, the 5D-Cycle utilised, the SOAR approach, Appreciative Inquiry versus the traditional process, and its overall use as well as its application to nursing and the benefits that can be derived from it.

CHAPTER 2
AN OVERVIEW OF APPRECIATIVE INQUIRY

"Vision without action is merely a dream. Action without vision just passes the time. Vision with action can change the world"

- Joel A Barker –

2.1 INTRODUCTION

In Chapter 1 an orientation to the study was provided by discussing the clinical learning environment as a vital component of emergency nursing programmes. Chapter 2 provides an in-depth discussion of Appreciative Inquiry, the approach that was utilised in this study. Appreciative Inquiry is discussed in terms of its historical background, the definition, its core principles, the 5D-Cycle utilised, the SOAR approach, Appreciative Inquiry versus the traditional process, its overall use as well as its application to nursing and benefits.

2.2 HISTORY

Appreciative Inquiry was first developed by David Cooperrider in 1980 when he did his doctorate on the topic of organised dynamics (Coghlan, Preskill & Catsambas 2003:5; Fry, Barrett, Seiling & Whitney 2002:4; Hammond 1998:6; Ludema, Whitney, Mohr & Griffin 2003:5; Preskill & Catsambas 2006:8; Preskill & Coghlan 2003:7; Reed 2007:22). By 1990 Cooperrider had founded the Taos Institute together with other Appreciative Inquiry practitioners that included Harlene Anderson, Ken and Mary Gergen, Sheila McNamee, Suresh Srivastva and Diana Whitney (Coghlan et al. 2003:5; Preskill & Catsambas 2006:9; Watkins & Mohr 2001:18). The Taos Institute became known for the training it provided to, amongst others, various organisations, consultants, educators and family therapists (Coghlan et al. 2003:5; Hammond 1998:7; Preskill & Coghlan 2003:7; Watkins & Mohr 2001:18) and became widely acknowledged for its development of the social constructionist practice (Watkins & Mohr 2001:18). The focus of the Taos Institute was on conversation, learning and co-creating relational advancement toward human and social changes (Watkins & Mohr 2001:19). Cooperrider, together with

Harlene Anderson, Ken and Mary Gergen, Sheila McNamee, Suresh Srivastva and Diana Whitney also published various books on related Appreciative Inquiry topics (Preskill & Catsambas 2006:9). Two examples of these books are: *The power of Appreciative Inquiry: A practical guide to positive change* by Diana Whitney and Amanda Trosten-Bloom, and *Appreciative Inquiry: Change at the speed of imagination'* by Jane Watkins and Bernard Mohr.

Figure 2.1 is a timeline depicting the history of Appreciative Inquiry over a 20-years period. The timeline illustrates the various important role players in the further development of Appreciative Inquiry. The interest roused in companies who participated in Appreciative Inquiry in order to develop the then 3D-Model and transform it into the later 4D-Cycle was an extremely positive development.

Timeline depicting the development of Appreciative Inquiry

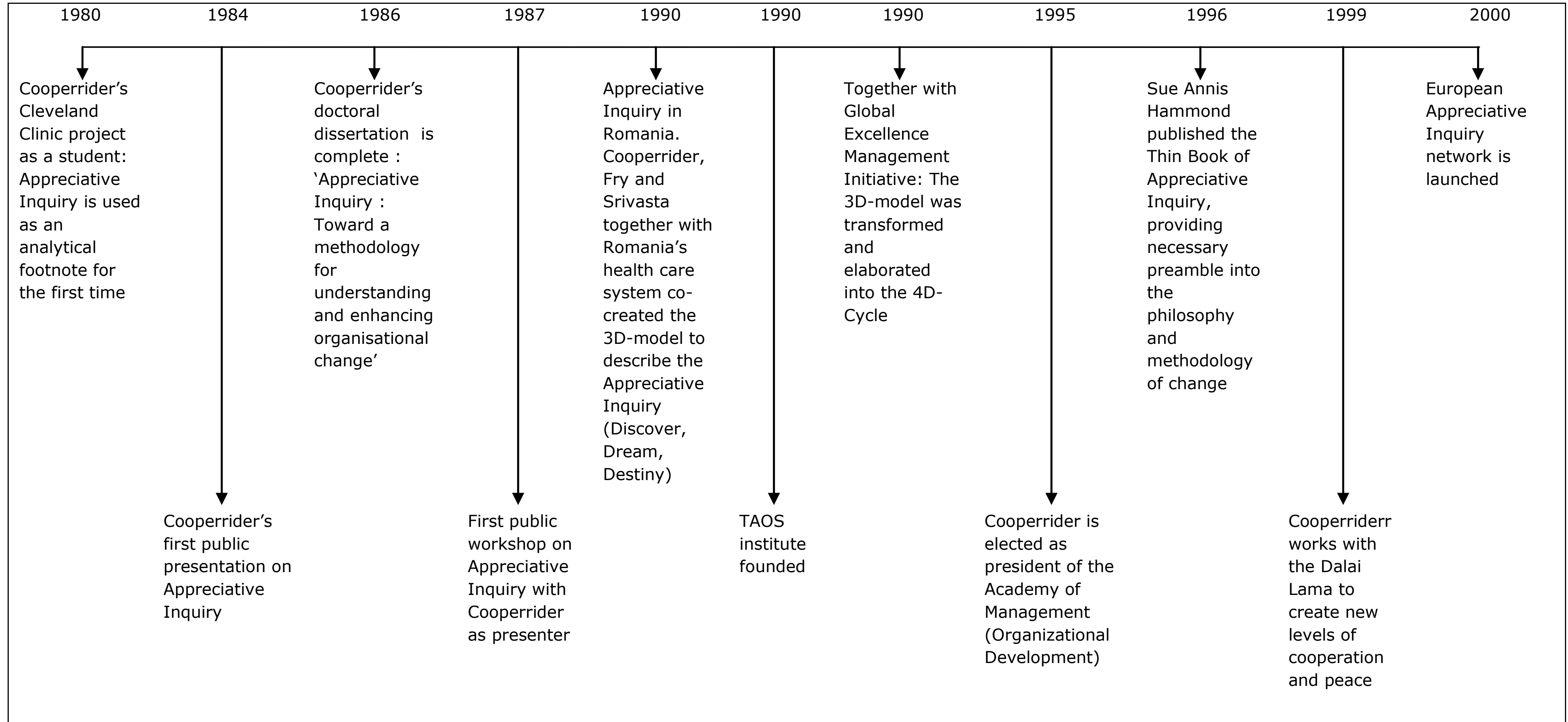

Figure 2.1: Timeline adapted from Watkins and Mohr (2001:15-21)

2.3 OVERVIEW

Appreciative Inquiry is viewed as the study as well as the exploration of the factors which give life to those systems when functioning at its best (Whitney & Trosten-Bloom 2003:1). Ludema et al. (2003:9) support this view by stating Appreciative Inquiry is the core for exploration of that which gives life to human systems when functioning at its best. It involves the quest for the recognition, understanding and development of life-giving forces within an organisation (Cooperrider, Whitney & Stavros 2005:i; Fry et al. 2002:6; Passmore & Hain 2005:1; Watkins & Mohr 2001:14). The idea of Appreciative Inquiry is providing an opportunity to construct an exciting and dynamic organisation (Cooperrider et al. 2005:xviii). Fry et al. (2002:259) holds that the creative conversation initiated through Appreciative Inquiry allows people to reflect on the moments in their lives when they felt most alive.

Appreciative Inquiry focuses on what is best in people and searches for what works best; it is embedded in excitement, creativity and pride (Preskill & Catsambas 2006:3; Preskill & Coghlan 2003:1; Reed 2007:187; Stevenson 2011:p. 3). It is about creating new and improved ideas or images and can therefore be viewed as an influential instrument to transform an organisation or programme (Bushe 1998: p. 2).

An individual's inherent inspiration is emboldened through Appreciative Inquiry because he or she is able to focus on his or her own positive experiences and work towards creating similar experiences (Preskill & Catsambas 2006:14). Appreciative Inquiry is a philosophy and a methodology that promotes positive organisational change. It is rapidly emerging as an interesting participative method that swiftly moves towards notable, positive, long-term results within an organisation (Fry et al. 2002:viii; Reed 2007:188). Fry et al. (2002:270) explain Appreciative Inquiry encourages people to inquire into their own stories relating to their peak experiences, hopes, dreams, wishes and ideals while Cooperrider et al. (2005:xviii) point out it encourages teamwork in order to promote understanding at the core of the organisation. Havens, Wood and Leeman. (2006:467) report that the utilisation of Appreciative Inquiry as a tool assisted them to develop a new way of thinking.

Ludema et al. (2003:8) view Appreciative Inquiry as a strong, rapidly developing theoretical foundation. Since Appreciative Inquiry is intended for the discovery of ideas, it also refers to a search for knowledge, skills and a theory of shared action that is intended to change the vision and will of a group (Cooperrider et al. 2005:3; Fry et al.

2002:6; Reed 2007:187-188). Preskill and Catsambas (2006:1) add it is of the utmost importance to ask questions in order for a programme to grow, change, renew and have success. It is vital that questions are asked concerning organisational learning, development, change, renewal as well as accomplishment (Fry et al. 2002:259; Preskill & Catsambas 2006:1).

Appreciative Inquiry may often expose shared values regarding ways of relating and working together, serving the goal of mutual respect (Fry et al. 2002:268). According to Reed (2007:2), Appreciative Inquiry then needs to build on these shared values. Furthermore, through Appreciative Inquiry organisational capacities are enhanced as members are brought together through shared values. Individual intrinsic motivation is encouraged since one is allowed to focus on one's own positive experiences and work towards creating more of them (Preskill & Catsambas 2006:14).

Participants are encouraged to create and expand their imagination by means of positive conversation (Fry et al. 2002:271). Perceiving Appreciative Inquiry as an adventure and a journey (Cooperrider et al. 2005:xvii; Hammond 1998:21; Watkins & Mohr 2001:14) is appropriate since it seeks to facilitate discovering the past and current capacities such as achievements, assets, unfamiliar possibilities, improvements, strengths, opportunities, stories, expressions of wisdom and possible expectations (Mohr, Smith & Watkins 2003, p.3). Furthermore, Stevenson (2011, p.4) concedes that Appreciative Inquiry relies on important discoveries. The topic selection requires searching for the positive explanation of what is considered necessary by the organisation or programme (Stevenson 2011, p.7).

2.4 DEFINITIONS

The *Concise Oxford dictionary* (2006) defines 'appreciate' as *"to acknowledge with gratitude*" and 'inquiry' as to "*seek information, to ask about or to investigate".* Watkins and Mohr (2001:14) view Appreciative Inquiry as a collaborative and participative, system-wide approach that seeks, identifies and improves life-giving forces that were previously at hand within the system. The authors further opine that Appreciative Inquiry can be seen as a journey during which insightful knowledge of human systems are revealed and utilised to co-construct the best and peak future of that system.

Whitney and Trosten-Bloom (2003:2-3) distinguish between 'appreciate' and 'inquiry' in an effort to explain and elicit a better understanding of the meaning of the concept

Appreciative Inquiry. Their stance is that 'appreciate' not only refers to "*recognising value* and *showing gratitude*", but also to "*the act of recognition with valuing and gratefulness* as well as *the act of enhancing value*". Moreover, 'appreciation' affirms past and present strengths and opportunities. 'Inquiry', according to Whitney and Trosten-Bloom (2003:3) is the "*act of exploration*" as well as "*discovery*", thus involving the search for "*new potential*". 'Inquiry' also implies that *one is open to change;* 'inquiry' is therefore viewed as a learning process for everybody involved.

To Cooperrider et al. (2005:415) the concept of 'appreciate' means "*to value something*". 'Appreciate' is also "*the act of recognizing the best in people or the world around us*".

'Inquiry' is defined by Cooperrider et al. (2005:418) as the means to describe "*the act of exploration and discovery*". Consequently, the authors (2005:3) define the concept Appreciative Inquiry as "*the cooperative co-evolutionary search for the best in people, their organizations and the world around them*" (Cooperrider et al. 2005:3). According to Preskill and Catsambas (2006:1), Appreciative Inquiry can be defined as a "*group process searching to identify and develop*" the best of "*what is*" within an organisation in order to produce improved opportunities. Havens et al. (2006:463) define Appreciative Inquiry as "*a philosophy and a methodology*" to promote positive organisational change.

It is evident from the abovementioned discussion regarding the definition of Appreciative Inquiry that the focus is on the search, appreciation and valuing of that "*what is best*" within a specific situation through the cooperation of all participants.

In the context of this study the concept Appreciative Inquiry referred to a collaborative process in search of what was best within the clinical learning environment and the emergency nursing programme.

2.5 CORE PRINCIPLES

The principles for Appreciative Inquiry were born out of theories and related studies (Preskill & Catsambas 2006:11). These principles are the core of Appreciative Inquiry's theoretical foundation towards positive organisational change. They simplify that it is the focal point on the positive image that results in the positive accomplishment. Organisations therefore have to make the conscious decision to focus on the positive in order to direct the inquiry (Cooperrider et al. 2005:9).

Appreciative Inquiry was initially encouraged and motivated by five basic principles that moved Appreciative Inquiry from theory into practice (Cooperrider et al. 2005:8). The five basic principles include: (i) the constructionist principle, (ii) the simultaneity principle, (iii) the poetic principle, (iv) the anticipatory principle, and (v) the positive principle. Preskill & Catsambas (2006:9) subsequently added three more principles, bringing it to eight basic principles. These additional three principles are: (vi) the wholeness principle, (vii) the enactment principle, and (viii) the free choice principle. The eight principles are discussed in sections 2.5.1 to 2.5.8. A summary of the eight principles is then depicted in Table 2.1.

2.5.1 THE CONSTRUCTIONIST PRINCIPLE

This principle states that social knowledge and organisational destiny are interwoven (Cooperrider et al. 2005:8; Cooperrider & Whitney 2005:49; Fry et al. 2003:4; Preskill & Catsambalas 2006:10; Preskill & Coghlan, 2003:9; Watkins & Mohr, 2001:37). In other words, as Bushe and Kassam (2005:166) explain, what one knows and what one does are closely interwoven. The questions that are asked become the source from which the potential is conceived and constructed (Cooperrider et al. 2005:8); accordingly, Appreciative Inquiry can be seen as an approach with which inspired proficiency can be cultivated. Whitney and Trosten-Bloom (2003:53) view the constructionist principle as one that inspires conversation and creates communication; for them this principle thus allows for the creation of knowledge and making sense of meaning.

Preskill and Coghlan (2003:9) opine that the constructionist principle is connected to the belief of the existence of numerous realities that are based on the awareness and mutual understandings of participants. Reed (2007:26) views the constructionist principle as one where different stories are shared regarding the past, present and future in such a manner that these stories have the influence to shape and reflect the thoughts and actions of people. Watkins and Mohr (2001:37) regard it as a principle considered to be true and genuine as pertains to an organisation, resulting in influencing the way one will react and approach change within the system, while Mikkelsen (2005:245) is of the opinion that inquiry in itself calls for change.

2.5.2 THE PRINCIPLE OF SIMULTANEITY

The principle of simultaneity recognises the fact that investigation and alteration does not accurately take apart moments (Cooperrider et al. 2005:8; Fry et al. 2002:5; Preskill & Catsambas 2006:10; Preskill & Coghlan 2003:9; Reed 2007:26; Watkins & Mohr

2001:38). Cooperrider et al. (2005:8) especially argue that the investigations and alterations can and should without a doubt be done concurrently. Inquiry is regarded as an intervention by these authors (2005:8). This view is supported by Preskill & Catsambas (2006:10) and Reed (2007:26) who agree that the data become the stories from which the potential is constructed. Watkins & Mohr (2001:38) view the principle of simultaneity as one of asking questions that sets the stage for what is still to be 'discovered' and that this then leads to conversation about construction of an organisational future. Change therefore occurs at the time that a question is asked (Whitney & Trosten-Bloom 2003:58).

2.5.3 THE POETIC PRINCIPLE

This principle is a metaphor that is used to describe an organisation as an open book (Cooperrider et al. 2005:8; Cooperrider & Whitney 2005:51; Fry et al. 2002:5; Preskill & Coghlan 2003:9; Watkins & Mohr 2001:38; Whitney & Trosten-Bloom 2003:61). Both Watkins and Mohr (2001:38) and Cooperrider et al. (2005:8) indicate that an organisation's story is frequently being co-authored. Fry et al. (2002:5), Preskill and Catsambas (2006:10) as well as Reed (2007:26) support this statement. Fry et al. (2002:5) point out the co-authors of the story is people within an organisation as well as outside who interact with the organisation. In other words, storytelling is valued (Mikkelsen 2005:245). Participants are invited to re-evaluate the aims and focus of any inquiry in the area of organisational life (Fry et al. 2003:5). Reed's (2007:26) stance is that Appreciative Inquiry has to support people through the individual and collective process by engaging their awareness and vigour. Appreciative Inquiry also has to take them through this authoring process. This ensures that everybody can see the past, present and future as endless sources of one's own learning, motivation or understanding and therefore study practically anything related to human experience (Cooperrider et al. 2005:8; Preskill & Coghlan 2003:9; Watkins & Mohr 2001:38).

2.5.4 THE ANTICIPATORY PRINCIPLE

The anticipatory principle refers to shared, unlimited imagination and communication about the future, which is a significant resource to produce positive organisational change or improvement (Cooperrider et al. 2005:9, Fry et al. 2002:5; Preskill & Catsambas 2006:10; Reed 2007:27; Watkins & Mohr 2001:38). Present day actions and achievements are guided and inspired by images of the future (Whitney & Trosten-Bloom 2003:64). It is essential that reflection of the future guides the current activities of the organisation (Cooperrider et al. 2005:9). An organisation exists because of individuals

who direct and continue to share some sort of communication about the organisation's functioning, goals and future (Cooperrider et al. 2005:9; Fry et al. 2002:5; Watkins & Mohr 2001:38). Cooperrider et al. (2005:52) view the anticipatory principle as one where the image of *that what may be* may direct the existing behaviour of the organisation; in other words what one expects, believes and imagines may influence the desired change (Mikkelsen 2005:245; Whitney & Trosten-Bloom 2003:64). In fact, Whitney and Trosten-Bloom's (2003:64) interpretation of the anticipatory principle is that it creates an atmosphere eliciting conversation among stakeholders within the organisation with regard to the creation and existence of the future of the organisation.

2.5.5 THE POSITIVE PRINCIPLE

Cooperrider et al. (2005:9) describe the positive principle as a decidedly concrete principle. The positive principle has developed from many years of experience of Appreciative Inquiry (Cooperrider et al. 2005:9; Preskill & Coghlan 2003:9; Watkins & Mohr 2001: 38; Whitney & Trosten-Bloom 2003:66). Furthermore, Cooperrider et al. (2005:9) assert that the drive for change needs a vast amount of hope and encouragement as well as sharing the joy of creating with others. In support, Preskill and Catsambas (2006:10) state positive action is the result of positive image. Reed (2007:27) elaborates on the positive principle by stating that focusing on the positive engages participants to move towards the desired future.

2.5.6 THE WHOLENESS PRINCIPLE

The wholeness principle brings out the best in people and organisations (Mikkelsen 2005:246; Preskill & Catsambas 2006:10; Whitney & Trosten-Bloom 2003:69). These authors are of the opinion that involving all the stakeholders in a universal group practice may encourage vision as well as construct joint ability. The 'whole story' can then be understood by each and every one, and connecting with the system will be less complicated. Whitney and Trosten-Bloom (2003:69-70) view the wholeness principle as the experience where one can understand the 'whole story', which can furthermore be viewed as a combination of various 'stories'. They opine that this procedure leads to a more focused attention span; the experiences may lead to the discovery of understanding, recognition and respect for differences.

2.5.7 THE ENACTMENT PRINCIPLE

"If one wants to see change, one needs to be the change." (Preskill & Catsambas 2006:10). Therefore, positive change can only happen if there is a representation of the ideal future, in other words to "live the way we want to be" (Preskill & Catsambas 2006:10). According to Preskill and Catsambas (2006:10), we create the future in an instant with what we say, what we see and with our associations. Mikkelsen (2005:46) explains the enactment principle as "acting as if self-fulfilling". Whitney and Trosten-Bloom (2003:72) view the enactment principle as one that suggests that transformation occurs by living in the present in the way we wish or desire to live in the future.

2.5.8 THE FREE CHOICE PRINCIPLE

Freedom of choice allows for better performance and commitment (Mikkelsen 2005:246; Preskill & Catsambas 2006:11; Whitney & Trosten-Bloom 2003:75). One can personally decide how, when and what one wants to add to participate in a discussion. This may encourage organisational excellence and positive change while liberating personal and organisational influence through freedom of choice, not coercion (Preskill & Catsambas 2006:11). Whitney and Trosten-Bloom (2003:75) suggest that people treated as volunteers may allow personal and organisational authority to surface.

Table 2.1: Summary of the eight principles of Appreciative Inquiry

PRINCIPLE	DEFINITION
Constructionist principle	*Words create worlds* • Reality is a subjective versus objective state. • It is socially created through language and conversation.
Principle of simultaneity	*Inquiry creates change* • Inquiry is intervention. • The moment we ask a question, we begin to create change.
Poetic principle	*We can choose what we study* • Organisations are like open books: endless sources of study and learning. • What we choose to study makes a difference, it describes and creates the world as we know it.
Anticipatory principle	*Image inspires action* • Human systems move in the direction of their images of the future. • The more positive and hopeful the images of the future, the more positive the present day action.

PRINCIPLE	DEFINITION
Positive principle	*Positive questions lead to positive change* • Momentum for large scale change requires large amounts of positive affect and social bonding. • This momentum is best generated through positive questions that amplify the positive core.
Wholeness principle	*Wholeness brings out the best* • Wholeness brings out the best in people and organisations. • Bringing all stakeholders together in large group forums stimulates creativity and builds collective capacity.
Enactment principle	*Acting 'as if' is self-fulfilling* • To really make a change, we must "be the change we want to see". • Positive change occurs when the process used to create the change is a living model of the ideal future.
Free choice principle	*Free choice liberates power* • People perform better and are more committed when they have freedom to choose how and what they contribute. • Free choice stimulates organisational excellence and positive change.

Adapted from Whitney and Trosten-Bloom (2003:54-55)

2.6 5D-CYCLE

Appreciative Inquiry was initially regarded as a model that was developed by Srivastva, Fry and Cooperrider in 1990 and which consisted of three phases, namely 'Discovery', 'Dream' and 'Destiny' (Watkins & Mohr 2001:18). The Appreciative Inquiry model then evolved from the 3D model to the 4D-Cycle (Watkins & Mohr 2001:19). Watkins and Mohr (2001:25) view this process as the 5D-Cycle whereby they added an additional 'D' namely 'definition'. There is also a move towards a sixth 'D' in some research. Withers (2006, p.5) utilised a 6D-Cycle in the research she conducted and named the sixth 'D' 'discussion'. There is no further reference in literature or research to the sixth 'D'.

The 5D-Cycle consists of five phases which encompasses the concept of a positive core. Conversation is guided by the 5D-Cycle during a group meeting. Since the focus of this study was on positive change within a programme, the positive core of the cycle is discussed first in section 2.6.1. Each of the phases of the 5D-Cycle is then discussed in more detail in sections 2.6.2 to 2.6.6. The phases, as illustrated in Figure 2.2 on page 31, are 'Definition', 'Discovery', 'Dream', 'Design' and 'Destiny' that comprise the central positive core.

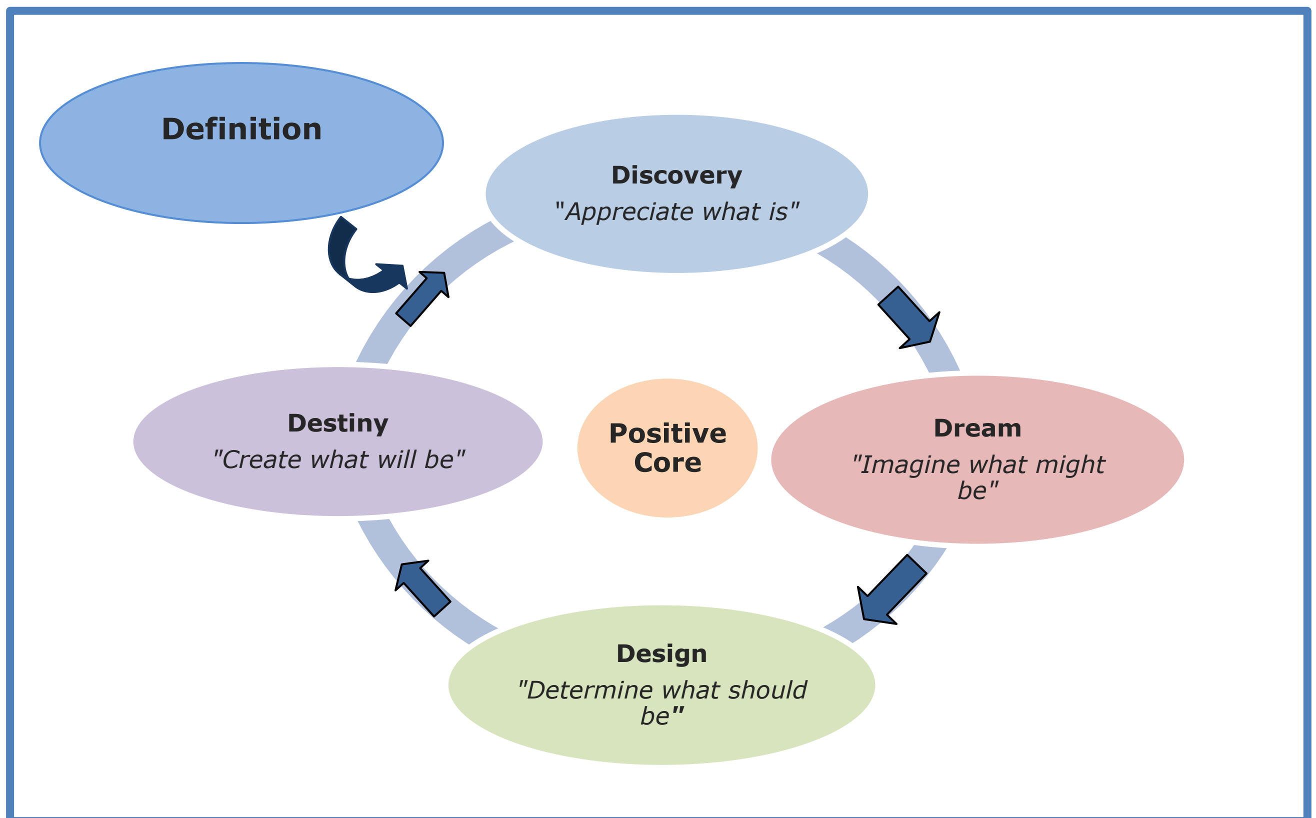

Figure 2.2: Appreciative Inquiry – 5D-Cycle. Adapted from Whitney and Trosten-Bloom (2003:6) and Cooperrider, Whitney and Stavros (2005:5)

2.6.1 POSITIVE CORE

Although the concept of a positive core is separate from the 5D-Cycle it is also central to the 5D-Cycle. Cooperrider et al. (2005:30) view Appreciative Inquiry as more than the 5D-Cycle, but they nonetheless opine that the 5D-cycle lies at the heart of Appreciative Inquiry. The 5D-cycle can be viewed as a tool that allows access to and mobilises the positive core. An organisation's or programme's positive core is therefore the beginning and end of an inquiry. Reed (2007:32) assesses that the positive core is made up of three elements, namely, strengths, goals and achievements and may be articulated in many ways.

Cooperrider et al. (2005:30-31) view the positive core as the 'golden thread' that is woven throughout the four phases of the 5D-Cycle. It is first of all identified in the discovery phase whereby a whole-system inquiry is then mobilised. After discovering what gives meaning to the organisation, it is improved throughout the dream phase. In this phase a clear and results-orientated vision is created. The design phase then follows wherein the challenging propositions of an ideal organisation or programme are

created. Subsequently it then needs to be implemented in the destiny phase whereby the positive potential of the organisation is strengthened.

In conclusion, Appreciative Inquiry begins and ends with appreciating that which gives life to an organisation or a programme (Cooperrider et al. 2005:31). In the context of this study the positive core will refer to programme evaluation that is done from a positive approach. The five different phases as depicted in Figure 2.2 are discussed in more detail.

2.6.2 DEFINITION

Watkins and Mohr (2001:25) view the definition as the external and first phase where goals are planned and developed. These goals will include the outlining of questions and the inquiry procedure as well as the approach and task management. Fitzgerald, Murrell and Miller (2003:6) are of the opinion that the definition phase is the most critical in the process and include the mutual defining of topics. Withers (2006, p.4) describes the definition phase as establishing a positive focus which includes the affirmative topic and is of the opinion that the researcher needs to determine on what specific issue he or she wants more information. To McKenna, Daykin, Mohr and Silbert (2007, p.3) the definition phase is the phase where one has to decide who to invite to the interviews and how one will go about inviting the participants. The authors add that one has to set up a planning team that will co-design and direct the strategic planning process. This team will then identify the stakeholders and how to engage them as part of the process. During the definition phase, the interview guide has to be created that will assist with gathering the required information regarding the strengths, viewpoints, aspirations and resources of all the participants (McKenna et al. 2007, p.3).

2.6.3 DISCOVERY

As the inquiry begins, discovery *("what is")* helps ignite the shared imagination of the dream *("what might be")* (Cooperrider et al. 2005:4, Ludema et al. 2003:10, Whitney & Trosten-Bloom 2003:7). The discovery phase aims at generating new knowledge of a desired future. Therefore it carries visualisation in ways that effectively translates images into potential, intentions into actuality, and ideas into practice. Discovery values the factors that give life to an organisation (Cooperrider et al. 2005:4, Fry et al. 2002:7; Watkins & Mohr 2001:25). Furthermore, McKenna et al. (2007, p.3) view the discovery phase as one whereby participants inquire into the strengths and opportunities of an organisation or a programme by asking powerful and positive questions.

Cooperrider et al. (2005:6) state discovery involves the evaluation of the various important factors that are relevant. Part of the discovery phase includes putting conversation and potential into perspective. In other words, discoveries and potential are shared by means of conversation whereby individual appreciation becomes joint appreciation. In addition, Fitzgerald, Murrell and Miller (2003:6) view the discovery phase as the phase where participants' experiences of their organisation are most revealed, thus simplifying the most critical phase of the process. Reed (2007:32) adds that discovery is appreciating that which gives life.

2.6.4 DREAM

During the dream phase one envisions *"what might be"* (Cooperrider et al. 2005:6; Ludema et al. 2003:11). Whitney & Trosten-Bloom (2003:8) and participants explore their hopes and dreams. Cooperrider et al. (2005:6) indicates that once one has discovered that which is best, it is natural to search for and envision new potential. Envisioning *"what might be"* involves the following: passionate thoughts, the creation of a positive image of a wanted and ideal future as well as new possibilities (Fitzgerald et al. 2003:6; Ludema et al. 2003:11; Whitney & Trosten-Bloom 2003:8). In addition, Fry et al. (2002:7) view the dream phase as the passionate thoughts about a "*positive image of a desired and preferred future*". McKenna et al. (2007, p.4) view the dream phase as the phase of aspiration and results, which align with two of the phases of the SOAR approach which is discussed in section 2.7.2.

The dream phase is significantly associated with strengthening the positive core of an organisation (view section 2.6.1). Study participants are encouraged to talk about what might be improved within an organisation (Cooperrider 2005:112; Fitzgerald et al. 2003:6; Reed 2007:33). Cooperrider et al. (2005:112) are of the opinion that this phase is grounded in an organisation's history and seeks to expand its potential. The intention of the dream phase is to create both synergy and enthusiasm.

Cooperrider et al. (2005:112) further believe the goals of the dream phase are to facilitate communication among stakeholders as well as to allow study participants to identify common themes. The idea of facilitating communication is to share positive stories in such a way that it creates both liveliness and passion. In support, Watkins and Mohr (2001:25) accept this is accomplished by means of sharing stories within a group during the discovery phase. Allowing participants to recognise common themes, encourages a group to observe and value the stories shared instead of judging or

analysing them. The positive themes are viewed as the basic structure for the rest of the Appreciative Inquiry process (Cooperrider et al. 2005:112).

2.6.5 DESIGN

The design phase is determining *"what will be"* (Reed 2007:33), or *"what should be"* (Whitney & Trosten-Bloom 2003:9). The design phase can be viewed as the solution to sustaining positive change as well as to react to the organisation's most positive aspects and peak possibilities (Cooperrider et al. 2005:142; Fitzgerald et al. 2003:6; Reed 2007:33). Furthermore, McKenna et al. (2007, p.4) is of the opinion that the design phase is the phase where one decides which opportunities have the most prospective.

Cooperrider et al. (2005:142) state the design phase starts by posing challenging propositions. Sometimes these propositions are even referred to as possibility propositions since it *bridges "the best of what is"* and is written in the here and now (Cooperrider et al. 2005:142). Thus, the propositions recreate the image of the organisation by means of presenting clear, persuasive pictures of how things will be once the positive core is fully efficient. These propositions readdress one's daily activities as well as generate future possibilities and a mutual vision for the organisation. The authors view the design as an important factor to integrate the *"best of the past and possibility"* and that it should be consistent with regard to the outcome of the inquiry (Cooperrider et al. 2005:142).

During the design phase the study participants co-construct the future whereby the extraordinary becomes everyday and regular (Cooperrider et al. 2005:6; Fitzgerald et al. 2003:6; Reed 2007:33). Study participants then agree on principles that need to guide them towards changes (Watkins & Mohr 2001:25). Furthermore, this phase is an exciting report of intentions grounded in realities of what has been successful in the past. Participants engage in dialogue in order to promote open sharing of both stimulating discoveries and possibilities (Fry et al. 2002:7; Ludema et al. 2003:11). Therefore, Appreciative Inquiry aids to generate a conscious supportive milieu for dialogue (Fry et al. 2002:7).

2.6.6 DESTINY (DELIVERY)

Cooperrider et al. (2005:175) and Reed (2007:33) view the destiny phase as the planning of *"what will be".* Fry et al. (2002:7) refer to this phase as the delivery phase. Cooperrider et al. (2005:176) state the goal of this phase is to guarantee that the dream

is now realised. In other words, the dream can now become reality once the intended actions have been declared and organisational support is requested (Cooperrider et al. 2005:176; Watkins & Mohr 2001:25). Ongoing conversation ensures that the process is constantly being revised and updated.

Reed (2007:33) is of the opinion that the destiny phase allows energy to move towards planning of actions, working out what will need to be implemented in order to realise the proposed solutions that was made during the designing phase. The stance of Fry et al. (2002:7) and Ludema et al. (2003:11) is that the destiny phase constructs the future through improvement and accomplishment and therefore they refer to it as the delivery phase. Commitments need to be made by all involved (Reed 2007:33). During the phase of delivery there is implementation as well as the measurement of success (McKenna et al. 2007, p.4).

2.7 APPRECIATIVE INQUIRY VERSUS TRADITIONAL APPROACH

Problem solving methods are used to resolve problems and the focus is on something that is broken and therefore needs to be fixed (Cooperrider & Srivasta 1987, p.147; Fry et al. 2003:260). Cooperrrider and Srivasasta (1987, p.147) posit that by focussing on a problem implies that one already knows what should be done.

According to Passmore and Hain (2005:2), traditional problem solving methods tend to produce conflict; if one focuses on something that is 'wrong', one is likely to imply 'blame'. Their perception is that by focusing on what is wrong threatens that what has worked well in the past and may lead to conflict. Fry et al. (2002:260) and Preskill and Coghlan (2003:5) concur that the process of problem solving methods includes the identification of problems followed by the analysis of the causes. They add problem solving methods also need to search for possible solutions and the development of action plans. Whitney and Trosten-Bloom (2003:16) hold that deficit-based methods focus on problems and how to conquer it. They argue that the success of deficit-based methods depends on the clear identification of a problem with the selection of an appropriate solution followed by the implementation of the selected solution.

Table 2.2 illustrates the difference between the deficit-based and the positive change. It is clear from the table that the shift from deficit-based change to positive change does indeed alter that what is studied (Whitney & Trosten-Bloom 2003:17). In other words,

the authors concede that the focus shifts from problems towards the positive core. In addition, the people involved in the research and who have access to the information are altered. Due to these changes, the result of the research is altered to the best possibility with the end result of ongoing positive change (Whitney & Trosten-Bloom 2003:17).

The approach of Appreciative Inquiry is to modify the rules of deficit-based change and bypassing many complexities (Cooperrider, in Fry et al. 2002:ix). Appreciative Inquiry does not aim at changing anything, but rather focuses on uncovering existing strengths, hopes and dreams; thus, by focusing on the positive potential, Appreciative Inquiry transforms both people and organisations (Whitney & Trosten-Bloom 2003:14).

Table 2.2: The shift from deficit-based to positive change

Step / Phase	Deficit-based change	Positive change
Intervention focus	Identified problem	Affirmative topics
Participation	Selective inclusion of people	Whole system
Action research	Diagnosis of the problem Causes and consequences Quantitative analysis Profile of need Conducted by outsiders	Discovery of positive core Organisation at its best Narrative analysis Map of positive core Conducted by members
Dissemination	Feedback to decision makers	Widespread and creative sharing of best practices
Creative potential	Brainstormed list of alternatives	Dreams of a better world and the organisation's contribution
Result	Best solution to resolve the problem	Design to realise dreams and human aspirations
Capacity gained	Capacity to implement and measure the plan	Capacity for ongoing positive change

Adapted from Whitney and Trosten-Bloom (2003:17)

There are definite differences between traditional problem solving research approaches and Appreciative Inquiry as illustrated in Table 2.3. Fry et al. (2002:260) explain traditional thinking focuses on problems whereas Appreciative Inquiry focuses more on development and success; in other words, traditional thinking is problem driven with Appreciative Inquiry being vision led – *"what could be"*. The authors observe that, where Appreciative Inquiry envisions possibilities for the future, traditional thinking analyses the cause of a problem. Therefore, traditional thinking is in search of possible solutions. Through conversation, organisations for excellence are designed by means of Appreciative Inquiry (Fry et al. 2002:260). They posit that, since traditional thinking

approaches focus on critical thinking and analysis whereby action plans are developed, this may lead to resistance; Appreciative Inquiry on the other hand is an energetic process that has the effect of co-constructed futures through generative thinking.

Table 2.3: Contrasting traditional thinking and Appreciative Inquiry thinking

Traditional thinking	Appreciative Inquiry thinking
Problem focused – identify the key problem	Development focused – discover the root causes of success
Problem driven	Vision led
Analysis of the root causes of the problem	Envision new possibilities for the future
Search for possible solutions	Design the organisation for excellence through conversation
Develop action plans	Co-construct the future
The glass is half empty	The glass is half full
Critical thinking and analytical (data)	Generative thinking (language)
Resistance	Energy
Directed/external	Facilitated/internal
Taught	Learned

Adapted from Passmore and Hain (2006:3) and Fry et al. (2003:260)

2.7.1 SWOT ANALYSIS

One of the more popular problem solving methods that has always been, and still is, utilised is the SWOT analysis. The SWOT analysis consists of four phases which include looking at the strengths, weaknesses, opportunities and threats (Muller, Bezuidenhout & Jooste 2006:48). The authors view the strength phase as one where there is an analysis of the internal organisational strengths that may be improved to promote strategic management. Strengths could be anything from the organisation's physical resources to its assets as well as its human resources (Muller et al. 2006:49). The authors further state weakness refers to the identification of any weaknesses within the organisation and view a weakness as an incident resulting in more negativity. Opportunities to them may include both the identification and utilisation of external opportunities whereby a situation can be improved. Therefore, a programme can also be seen as an opportunity to be improved. Lastly, threats may relate to the identification of both internal and external threats to a situation (or programme) that may have a negative impact on the sustainability of that particular programme (Muller et al. 2006:49).

In contrast, Appreciative Inquiry focuses on a positive approach that is based on strengths (Reed 2007:24). Appreciative Inquiry discovers innovations (Cooperrider et al. 2005:3) while it focuses on that which gives life to an organisation and is working in its best interest (Cooperrider et al. 2005:xviii; Fry et al. 2002:260). Appreciative Inquiry furthermore appreciates and values the best of that *"what is",* envisions that what *"might be",* co-constructs the future for that what *"should be"* and empowers that what *"will be"* (Cooperrider et al. 2005:5).

The SOAR approach is based on the traditional SWOT analysis (Cooperrider et al. 2005:405) and is a transformed model from the traditional SWOT analysis (Stavros, Cooperrider & Kelley 2003, p.12). SOAR assists people to connect both purpose and values through strategic conversation (Stavros & Hinrichs 2009:14) by generating a chain of conversations in order to gain a whole systems outlook (Stavros & Hinrichs 2009:16).

2.7.2 SOAR APPROACH

The SOAR approach is a strategic approach that starts with a strategic inquiry (Cooperrider et al. 2005:405; Stavros et al. 2003, p.12). SOAR consists of four steps: an inquiry into the strengths, opportunities, aspirations and then the results (Stavros et al. 2003, p.12). During the strategic inquiry the focus and aim is to discover the greatest strengths and opportunities of an organisation or programme (Stavros et al. 2003, p.12; Stavros & Hinrichs 2007:13) These strengths and opportunities are then explored by all participants. Next, the participants are invited to share their aspirations and co-construct a desired future (Stavros et al. 2003, p.13). Once this has been accomplished, acknowledgment and reward programmes are designed in order to inspire participants to achieve measurable results.

Research has demonstrated that by building on people's strengths may create better results than spending time correcting their weaknesses (Stavros & Hinrichs 2009:12). Weaknesses and threats are, however, not ignored but rather reframed and given suitable focus within the opportunities and results (Stavros & Hinrichs 2009:13). In Figure 2.3 an overview of the SOAR principles is presented.

In Table 2.4 the various differences between the SWOT analysis and the SOAR approach is illustrated. The SWOT analysis is more analysis orientated whereas the SOAR approach is action orientated (Stavros & Hinrichs 2009:12). It must be noted that the

SWOT analysis focuses more on weaknesses and strengths which depletes one's energy. By comparison, the SOAR approach focuses on strengths and opportunities that create energy. Attention is paid to various gaps when the SWOT analysis is followed whereas results will be the outcome if the SOAR approach is followed (Stavros & Hinrichs 2009:12).

Table 2.4: Contrasting the SWOT analysis and the SOAR approach

SWOT analysis	SOAR approach
Analysis orientated	Action orientated
Weaknesses and threats focus	Strengths and opportunity focus
Competition focus – Just be better	Possibility focus – Be the best
Top down	Engagement of all levels
Incremental improvement	Innovation and breakthrough
Focus on analysis → planning	Focus on planning → implementation
Energy depleting. There are so many weaknesses and threats	Energy creating. We are good and can become great
Attention to gaps	Attention to results

Adapted from Stavros and Hinrichs (2009:12)

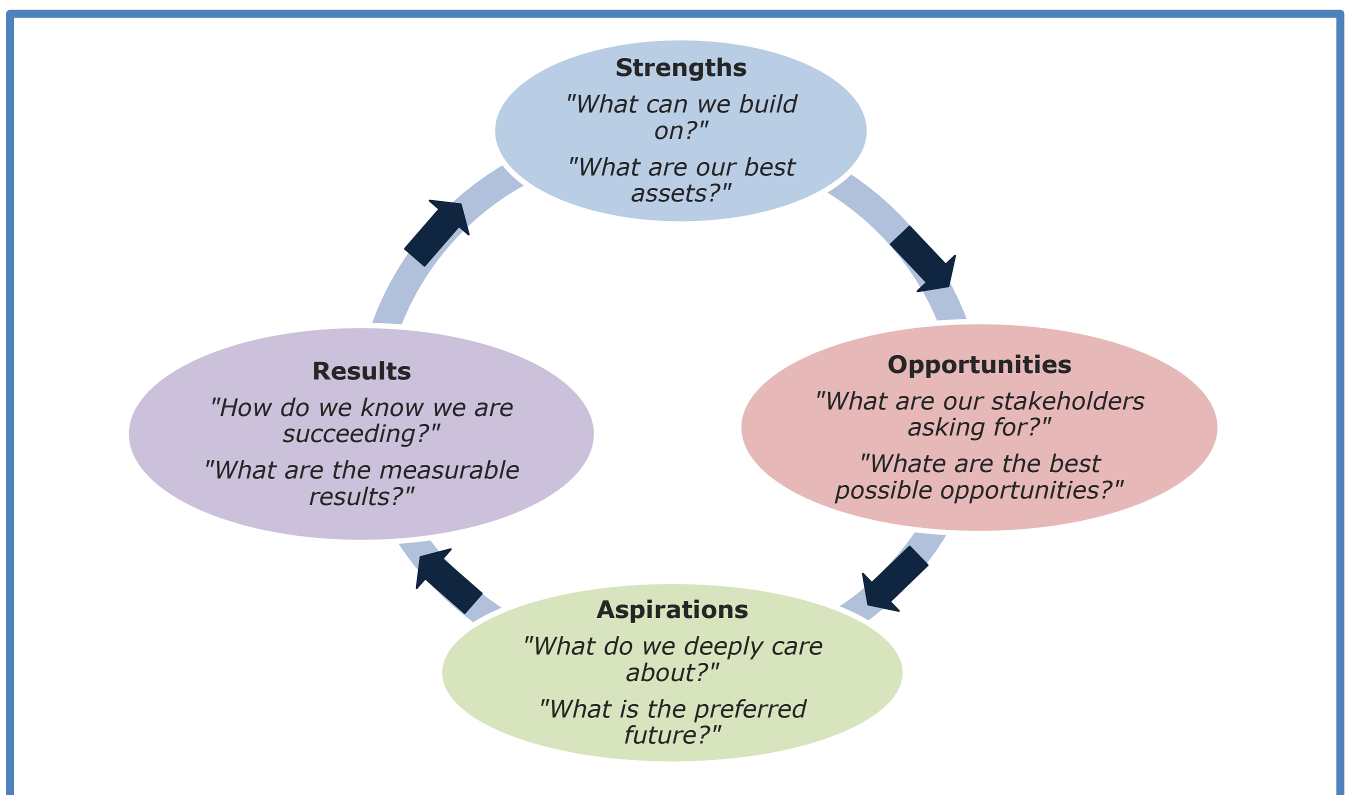

Figure 2.3: Phases of the SOAR approach as adapted from Cooperrider et al. (2005:405)

2.8 UTILISATION IN OTHER FIELDS

Appreciative Inquiry has been utilised in many other studies not involved in the field of nursing. Following are some examples of how Appreciative Inquiry was utilised in previous studies in other different fields of research.

In 1991, Laird, Yager, Hucka and Tuck, published an article titled 'Robo-SOAR: An integration of external interaction planning and learning using SOAR' in the *Robotics and Autonomous Systems* (1991:113-128). The authors utilised the SOAR approach in this research to learn more and improve competency and accuracy of problem solving in the field of engineering.

At the 2006 Academy of Criminal Justice Science Annual Conference in Baltimore, Maryland, feedback was given by Gray, Erp and Lovrich regarding overcoming barriers. The publication was entitled 'Appreciative Inquiry: Overcoming barriers to change in police organizations.' The presenters referred to many examples where they utilised Appreciative Inquiry with success. At the Washington State Department of Social and Health Services Technology Department, for example, Appreciative Inquiry was utilised to improve the organisation's customer service (Gray, Erp & Lourich 2006, p.6). Another example was the Washington State Extension Master Gardener Program (Gray et al. 2006, p.7), where Appreciative Inquiry was utilised in order to improve trust within a volunteer training programme.

Bushe (2007, p.5) refers to a case study that was conducted in 2007 at the Metropolitan School District in order to change teacher-employer conflict as well as government focus on student achievement. Appreciative Inquiry was chosen as the research methodology and it appears as if the method was successful. Relating to medicine, the innovation partners compiled a report in 2003 where Appreciative Inquiry was utilised with success. This was titled *'Appreciative Inquiry and learning assessment: An embedded evaluation process in a transnational pharmaceutical company'* by Mohr, Smith and Watkins (2003, p.1-4).

2.9 APPLICATION TO NURSING

Havens et al. (2006:463) utilised Appreciative Inquiry in a study to improve nursing practice and patient care. The authors involved nursing leaders in a venture to improve communication and teamwork in order to enhance the nurses' participation in decision

making as well as to improve cultural attentiveness and understanding. The study of these researchers seemed to be successful within the hospital as it was adopted by the majority of staff and change was introduced successfully (Havens et al. 2006:469). According to the authors, change also occurred through the redesign of formal structures and processes within the hospital and, moreover, led to change within other departments and disciplines.

Appreciative Inquiry has been utilised by Farrel, Douglas and Siltanen (2003:364) in a study to explore and develop a nursing college's community of interest. The authors looked at the significance of maintaining the history of a nursing college in order to fulfil its hope of a shared and co-created vision. The result of the study recommended conservation of the shared values of the college's past and of its vision for the future. Another study within the nursing profession where Appreciative Inquiry was successfully utilised was one by Keefe and Pesut (2004:103-109) entitled, *Appreciative Inquiry and leadership transitions.* This study was conducted with regard to adapting to change in leadership techniques for both faculty members as well as new leaders.

Since Appreciative Inquiry has in the past been successfully utilised in the nursing profession as well as in programme evaluation (Preskill & Coghlan 2003:37), it was identified as an appropriate approach to conduct the current study with. Appreciative inquiry is a participatory process that addresses various issues within an organisation or programme (Preskill & Coghlan 2003:16). Therefore, Appreciative Inquiry was utilised in this study to evaluate the pre-hospital learning environment as well as to enhance the programme that the emergency nurse students were enrolled for at the specific tertiary nursing education institution.

For the purpose of this study Appreciative Inquiry was utilised as research methodology and is discussed in more detail in Chapter 3. The results obtained from the Discovery, Dream and Design phases during the appreciative interviews were utilised to evaluate the current emergency nurse programme that the emergency nurse students are enrolled for. The data obtained from these first three phases were utilised to make recommendations towards programme enhancement.

2.10 BENEFITS AND POSSIBILITIES

The process used in Appreciative Inquiry generates discussions and dialogue through the engagement of everybody in order to cultivate shared meanings (Cooperrider et al.

2005:xix, 93). Improved communication builds relationships that enable people to be known within this particular relationship (Preskill & Catsambas 2006:3; Stavros & Hinrichs 2009:12; Whitney & Trosten-Bloom 2003:20). Furthermore, Appreciative Inquiry directs instantaneous change even if the situation is complex in nature (Judy & Hammond 2006, p.4). In addition, the benefits of Appreciative Inquiry include the construction of a common ground image for the future, the acceleration of organisational learning by speeding up the extent of innovation, and augmenting the power of every small triumph (Cooperrider et al. 2005:xix). Appreciative Inquiry creates an opportunity for all people to be heard with recognition and with mutual respect which, in turn, increases their morale and confidence once they realise their contributions and ideas are heard and even considered. Whitney and Trosten-Bloom (2003:20) add that if people are heard it may generate the opportunity to share their dreams. This view is supported by Preskill and Catsambas (2006:3). Appreciative Inquiry unites labour and management in mutually envisioned partnerships (Cooperrider et al. 2005:xix).

Appreciative Inquiry offers people diplomacy and support to act, as well as persuade and allow them to be positive. (Preskill & Catsambas 2006:3). An environment is created where participants can decide how they wish to contribute towards the planned change (Whitney & Trosten-Bloom 2003:20). Cooperrider et al. (2005:93) comment that Appreciative Inquiry creates a positive atmosphere of trust and regard. The process of Appreciative Inquiry creates opportunities for people to share their knowledge and also willingly promote and embrace positive organisational change (Cooperrider et al. 2005:xvii). Therefore, long-term positive change is yet another benefit of Appreciative Inquiry (Cooperrider et al. 2005:xviii; Stavros et al. 2003:8). In addition, Cooperrider et al. (2005:xi) opine that Appreciative Inquiry increases employee satisfaction and enhances productivity. The authors also view increased levels of communication, a decrease in turnover, the stimulation of creativity and alignment of the organisation with its vision, mission, objectives and strategies, as further benefits of Appreciative Inquiry.

Reed (2007:42) identifies the fact that Appreciative Inquiry supports people, since Appreciative Inquiry is assisted by active input from those investigating change. Appreciative Inquiry furthermore allows people to come together and reach and understand each other since it involves interaction with the sharing and exploring of positive experiences. Positive development is allowed by Appreciative Inquiry since it focuses on both change and innovation. Appreciative Inquiry strengthens the execution of key information technology changes. For all stakeholders Appreciative Inquiry exhibits both positive purpose and trust (Reed 2007:42).

Appreciative Inquiry also builds high performance teams in order to make change possible (Cooperrider et al. 2005:xix). The authors are of the opinion that the process of Appreciative Inquiry encourages teamwork in order to promote a better understanding of a system. Therefore, ownership is promoted since all stakeholders are brought together in order to work actively within a team (Judy & Hammond 2006, p.4. Furthermore, the author views Appreciative Inquiry as a sustainable process whereby positive energy is generated in order to carry out the change. Appreciative Inquiry also generates plans, grounded within reality, for the future whereby it uncovers experiences from the past and present and then involves people to plan for the future (Reed 2007:42, Judy & Hammond 2006, p.5). Furthermore, Reed is of the opinion that Appreciative Inquiry promotes changes within the workplace by emphasising the importance of focusing on the workplace setting as well as the understanding of its context.

Appreciative Inquiry liberates power by unleashing both individual and organisational power. Therefore, one can deduce that Appreciative Inquiry promotes ownership (Whitney & Trosten-Bloom 2003:19). By using Appreciative Inquiry the focus of analysis is redirected towards success; Appreciative Inquiry is successful since it rather treats people as people and not as machines (Whitney & Trosten-Bloom 2003:19). The authors are of the opinion that Appreciative Inquiry allows leaders to create an organisation or programme that is rich in knowledge, strength-based and adaptable towards learning. The success of Appreciative Inquiry is known due to the experience and research done by the authors (Whitney & Trosten-Bloom 2003:19). Last, but not least, Appreciative Inquiry embraces diversity since it engages diverse stakeholders in their storytelling (Preskill & Catsambas 2006:135, Judy & Hammond 2003, p.4). These stakeholders are, or may be, from diverse cultures that include ethnicity, religion, educational background, gender and position in the hierarchy (Preskill & Catsambas 2006:136).

2.11 CRITIQUE

Appreciative Inquiry does not ignore problems and neither does it deny problems (Preskill & Catsambas 2006:26; Watkins & Mohr 2001:9; Whitney & Trosten-Bloom 2003:18). These authors propose that the methodology of Appreciative Inquiry rather suggests that if one wishes to transform a situation, organisation, or programme one should focus on its strengths. Whitney and Trosten-Bloom (2003:18) suggest that one may be more effective by focusing on the strengths; the attention must be shifted from problems towards possibilities. Preskill and Catsambas (2006:26) suggest that

Appreciative Inquiry addresses challenges, problems and conflict by shifting the focus towards hope and possibilities of that which has worked in the past.

Problems are solved by focusing on what has worked and therefore knowing what to do, and by removing or diminishing what will not work (Preskill & Catsambas 2006:27). Whitney and Trosten-Bloom (2003:18) posit that if one focuses on the positive, there may be less conflict and more cooperation within an organisation. Watkins and Mohr (2001:9) confirms this view and argue that, if one focuses on the problem instead of the positive, it includes the focus of who is to blame and this may lead to resistance to change. The authors interpretation is that by focusing on the problems, more images of the problem and what is wrong can be created.

2.12 SUMMARY

In this chapter Appreciative Inquiry was discussed as a positive philosophy, process and methodology used in research in different fields, such as organisations, teaching and nursing. In Chapter 3 an overview is provided of the research method used to conduct this study.

CHAPTER 3
RESEARCH DESIGN AND METHODS

"Success is to be measured not so much by the position that one has reached in life as by the obstacles which have been overcome while trying to succeed."

- Booker Taliaferro Washington –

3.1 INTRODUCTION

Chapter 2 provided the reader with an in-depth overview of the theoretical framework of Appreciative Inquiry that was utilised in this study. Chapter 3 provides a broad overview of the research design and method utilised during the research process. In addition, as a qualitative approach, Appreciative Inquiry was utilised to guide the study. A descriptive design was chosen to explore and describe the phenomenon, namely, evaluating the pre-hospital environment as a learning environment for students enrolled for an emergency nursing programme. The research method includes a discussion on the population, sampling, sample, data collection and data analysis. The specific ethical considerations are highlighted as applicable to this study.

3.2 RESEARCH DESIGN

This study used a qualitative, explorative and descriptive design. A research design is defined by Polit and Beck (2008:765) as the *"overall plan for addressing a research question, including specifications for enhancing the study's integrity".* A research design is regarded as a blueprint for conducting a study and will maximise the control over factors that may impede its validity – trustworthiness in the case of qualitative research (Burns & Grove 2005:211; Uys & Basson 1991:40). Burns and Grove (2005:211) are of the opinion that the research design is the end result of a series of decisions made by the researcher with regard to how the study will be implemented. The research design assists in directing the planning for the implementation of the study.

In the view of Uys and Basson (1991:40) a research design can be interpreted in two ways. Firstly, a research design can be viewed as the total strategy for the study which includes the identification of a problem up to and including the final planning for data

collection. Secondly, a research design is the structural framework for the implementation of the study. In this study a qualitative design was utilised to determine the clinical learning experiences of the emergency nurse students within the pre-hospital learning environment as described in section 3.2.1. This study was descriptive in nature.

3.2.1 QUALITATIVE APPROACH

A qualitative study is defined as "*the investigation of a phenomenon ... through the collection of rich narrative materials using a flexible research design*" (Polit & Beck 2008:763). Qualitative research is regarded as an evolving research design whereby the researcher makes ongoing decisions that will reflect what has been learned during the study (Polit & Beck 2008:219).

Various data collection strategies are merged together in order to obtain all the required data. With a qualitative design the researcher is interested in "*understanding the meaning people have constructed*" (Merriam 2009:13). The author also views this as the way people make sense of what happens around them as well as of their own experiences – therefore the end results are highly descriptive in nature. Continuous involvement from the researcher's side is of the essence.

According to Mason (2005:3), qualitative research has a few general yet effective definitions as set out below.

- Qualitative research is grounded within a philosophical theory. Therefore, qualitative research can be generally understood in the sense that it is concerned with how the social world is construed, understood, experienced and shaped.
- Qualitative research is based on data generation methods that are flexible and sensitive towards the social context in which the data are produced.
- Qualitative research is based on analysis, explanation and arguing that involves understanding of the detail, context as well as the complexity of the research. Therefore, qualitative researchers aim to produce a contextual understanding of the data.

As identified by Polit and Beck (2008:219) and Creswell (2007:37) the characteristics of a qualitative design include various aspects.

- *A natural setting*. The researcher collects data within the field where the students/participants experience the issue under study. Therefore the field refers to the pre-hospital learning environment.

- *Multiple data sources*. Therefore, there should be an integration of the different data collection strategies, for example, triangulation. Appreciative Inquiry schedules was utilised and Appreciative interviews were added to ensure triangulation.
- *Flexibility and elasticity*. Qualitative designs are able to adjust to that which is learned throughout data collection. With the Appreciative interviews additional questions could be asked and the interviewer was able to rephrase questions if it was not understood.
- *Holistic account*. The researcher tends to strive towards the understanding of the entire concept. Therefore, there is identification and reporting on a range of factors that is implicated in the situation under study. Applicable to this study the situation under study is the emergency nurse students' view of the pre-hospital learning environment.
- *Intense involvement from the researcher*. Data can be collected by the researcher personally through participant interviews. The researcher handed the Appreciative Inquiry schedules to the participants personally. Consent was obtained by the researcher in writing prior to the handing of Appreciative Inquiry schedules.
- *The researcher is the key instrument*. This calls for the researcher to become the instrument. The researcher does not rely on instruments designed by others. Therefore the researcher designed the Appreciative Inquiry schedule utilising the 5D-cycle of Appreciative Inquiry.
- *Inductive data analysis.* This requires that continuous analysis of data is done by the researcher who works through various themes. Therefore the researcher read through the Appreciative Inquiry schedules continuously to identify new themes.
- *Interpretive inquiry*. The researcher makes an interpretation based on his or her own observations. By reading the Appreciative Inquiry schedules, the researcher was able to interpret what the participants (students) shared.

Creswell (2007:37) states qualitative studies begin with an assumption relating to a social or human problem. Relating to this research, there is an assumption that there is little known about the emergency nurse students' learning experience within the pre-hospital learning environment, since there are cost implications involved for especially the private sector. Creswell's (2007:37) stance is also that the researcher utilises a promising qualitative inquiry approach in order to collect data within a setting which is natural to the participants. The natural settings for the participants refer to the pre-hospital learning environment. Therefore, the theoretical framework of Appreciative Inquiry was utilised for data collection in this study. A qualitative study is one where the

researcher regularly claims knowledge based on constructivists' observations or participatory viewpoints (Creswell 2003:18).

Qualitative studies are based on various inquiry strategies which include narratives, phenomenology, ethnography, grounded theory studies, or case studies (Creswell 2003:18). The focus of this study was on narratives where students 'told their stories' pertaining to the best experiences and wishes within the pre-hospital learning environment. Furthermore, qualitative studies aim to search for the meaning of a phenomenon from the viewpoint of the participants; this then lies in the identification of a culture sharing group as well as the study of how the phenomenon develops mutual patterns of behaviour over a period of time (Creswell 2003:20). Therefore, the researcher's aim was to search for that which was positive in the pre-hospital learning environment that could have provided meaning to the students' learning as well as to identify the wishes (challenges) that can be addressed to enhance learning in the pre-hospital learning environment.

Through the use of Appreciative Inquiry which is in essence also a narrative, participants are encouraged to share their hopes, dreams, visions and beliefs through conversation (Fry et al. 2002:3). In the first step of the 5D-Cycle of Appreciative Inquiry, the emergency nurse students were requested to describe their peak experience within the pre-hospital learning environment through storytelling (narrative).

3.2.2 EXPLORATIVE AND DESCRIPTIVE DESIGN

In this study the researcher attempted to understand, explore and describe this specific pre-hospital learning environment and how it impacted on the students' experience. Therefore, it is important to note that the research results will be applicable only to emergency nursing at the particular tertiary nursing education institution in Gauteng, South Africa. Based on the findings from the study, recommendations could therefore be made with regard to what would work well (*"what is"*), as well as to what could be enhanced (*"what should be"*).

This study was explorative in nature since it aimed to understand the emergency nurse students' experience in the specific pre-hospital learning environment due to a lack of basic information about this environment (Bless & Higson-Smith 2004:41). Furthermore, the main concern of this study is to understand the natural setting of the pre-hospital learning environment as perceived by the emergency nurse students participating in the

research. This is in line with the opinions of Merriam (2009:14) and Creswell (2007:37). Explorative designs focus on understanding small groups lived experiences (Cresswell 2003:15). Since the research was limited to a specific tertiary nursing education institution in Gauteng, a small group was utilised in the research.

This study was also descriptive in nature because it described, in words (Merriam 2009:16), how things really were in the pre-hospital learning environment. According to Burns and Grove (2005:734), a descriptive design is useful in identifying an interesting phenomenon. A descriptive design can assist in the development of conceptual and operational definitions of the identified variables. Descriptive designs are a way to discover new meaning, describe what exists, and determine the frequency of an occurrence as well as the categorising of information (Burns & Grove 2005:26). Merriam (2009:16) states the end result of a qualitative design is highly descriptive in nature.

Bless and Higson-Smith (2004:37) observe that, when the researcher is interested in describing a certain phenomenon at hand, descriptive studies are conducted. Brink (2006:102) and Burns and Grove (2011:256) are in agreement that descriptive designs are used when more information is required with regard to a specific field since it provides an image of the phenomenon as it occurs naturally. They concede that descriptive designs may be utilised for the development of theories, to identify challenges within the existing practice, to rationalise one's current practice, to make judgements, and also to determine what others may have done in a similar situation. A descriptive design may also be useful to focus on the positive since problems are not ignored if Appreciative Inquiry, as described in Chapter 2 (see section 2.10), is the approach used in a study.

The major purpose of a descriptive study is to explore and describe a phenomenon in a real life situation, thereby assisting with generating new knowledge pertaining to concepts or topics about which limited or no research has been done (Burns & Grove 2005:44), it simultaneously provides a reflection of situations as they naturally occur (Burns & Grove 2005:232) in a real life environment (Burns & Grove 2011:262). In the context of this study the real life environment referred to the pre-hospital learning environment.

Polit and Beck (2008:752) define descriptive designs as "*research that has as its main objective the accurate portrayal of the characteristics of situations … with which certain phenomena occur*". Descriptive designs assist in the description of feelings (Polit & Beck

2008:228); in fact, descriptive qualitative studies refer to studies that do not fit into a specific typology, but provide a comprehensive summary of a phenomenon (Polit & Beck 2008:237).

According to Brynard and Hanekom (2006:37), a qualitative study refers to research that assists to construct descriptive data since it is done in the participants' own words as regards their experiences. Thus, with qualitative studies new knowledge is often discovered or unexpected findings are revealed. The likelihood of changing research plans in response to these fortuitous discoveries is undisputed (Brynard & Hanekom 2006:37) since the aim of qualitative studies is to value events within the actual natural context in which they occur (Babbie & Mouton 2001:272).

In this study the phenomenon being studied comprised of the emergency nurse students' experiences within a real life situation in the pre-hospital environment during the emergency nursing programme as expressed in their own words. The researcher attempted to identify the experiences indicative of a personal and professional nature. By utilising Appreciative Inquiry, the researcher wished to describe *"what should be"* recommended within the pre-hospital learning environment to enhance the clinical learning experiences of the emergency nurse students.

3.3 RESEARCH METHOD

In general, a method is referred to as "*the quality of being well prepared and organized"* (*Oxford paperback dictionary & Thesaurus 2007*). Polit and Beck (2008:758) define methods with regard to research as *"the steps, procedures and strategies for gathering and analyzing data in a study".* They add research methods are "*the techniques used to structure a study and to gather and analyse information in a systematic fashion"* (Polit & Beck 2008:765). The research method will be discussed in terms of the target population, sampling, sample, data collection and data analysis. Each of these aspects will be discussed in section 3.3.1 to 3.3.5.

3.3.1 TARGET POPULATION

The population of a study can be seen as that which sets boundaries for a study / research. A population therefore refers to a specific set of individuals or organisations with specific characteristics that are going to be used in the study (De Vos, Strydom, Fouchè, & Delport 2002:198). Brynard and Hanekom (2006:55) refer to a population as

"a group within the universe that possesses the specific characteristics required". The specific group of persons or elements that are focused on can be defined as the population (Bless & Higson-Smith 2004:84; Burns & Grove 2011:290; Greenfield 2002:195).

The target population is the entire group of people who meets the sampling criteria whereas the accessible population is the subset of the people within a country, city or unit (Bless & Higson-Smith 2004:8; Brink 2006:198; Burns & Grove 2011:290). According to Brink (2006:206), a population is defined as *"a complete set of persons or objects that possess some common characteristics that is of interest to the researcher"*. Polit and Beck (2008:761) concede by stating that a population is an entire set of individuals displaying common characteristics.

For the purpose of this study the target population was emergency nurses who obtained their qualification after they had been enrolled in the emergency nurse programme at a specific tertiary nursing education institution in Gauteng as well as emergency nurse students enrolled for the emergency nurse programme at the time the research was conducted and that had already completed the pre-hospital rotational period. The total number of target population was **60**. The accessible population was previously enrolled students as well as students who were enrolled in their second year of the emergency nursing programme at a tertiary nursing education institution in Gauteng at the time when the study was conducted and who conformed to the required characteristics (Burns & Grove 2005:342; Polit & Beck 2008:338).

The required characteristics and inclusion criteria were as follows:

- Emergency nurses who, at the time of the study, had already successfully completed their second year of the emergency nursing programme and had rotated through the pre-hospital learning environment less than three years previously, and
- Emergency nurse students who had already rotated through the pre-hospital learning environment and were enrolled for the emergency nurse programme at the time the study was conducted.

3.3.2 SAMPLING

Mason (2005:122) states sampling refers to the selection of a specific number of probable participants other than the ones that has been made, that would have been probable. Burns and Grove (2005:341) explain that sampling entails selecting a specific

number of probable elements – persons, behaviours, events "or any other single unit of a study" – with which to conduct the study with. Polit and Beck (2008:765) define sampling as *"the process of selecting a portion of the population to represent the entire population".*

The aim of sampling is to study all the components that may form the population of interest (Greenfield 2002:185). Brynard and Hanekom (2006:54) suggest sampling is used to:

- Make things easier regarding research because it is easier to study a representative sample rather than a complete population;
- Save time since it is time-consuming to study the complete population, especially if this population is widely distributed;
- Be cost effective – by observing, interviewing and using questionnaires as data collection methods may be very costly if, once again, the population is widely distributed, and
- Establish specific entities of the whole.

The sampling technique utilised in this qualitative design was purposive sampling based on the judgement of the researcher (Bless & Higson-Smith 2004:92; Brink 2006:133; De Vos et al. 2005:202). Purposive sampling is also known as judgemental sampling (Brink 2006:133) and is based on the researcher's selection criteria (De Vos et al. 2005:202; Merriam 2009:77). The researcher purposefully selects the sample to contribute towards exploring the phenomenon under study (Creswell 2007:125). In this study, the sample selected reflected an emergency nurse student within a specific situation, namely the pre-hospital learning environment (Merriam 2009:78).

The majority of the emergency nurse students who were enrolled for the emergency programme for the period from 2008 to 2010 lived in the Pretoria area. The sampling conformed to the set criteria (view section 3.3.1) as determined by Bless and Higson-Smith (2004:85) that included the following:

- Emergency nurses who had successfully completed the emergency nursing programme were regarded as a *well-defined population.*
- Emergency nurse students who had completed the pre-hospital rotational period.
- The sample was adequately chosen since the emergency nursing programme is only presented at three tertiary institutions in South Africa and the study was only applicable to a tertiary institution in Gauteng.

The chosen sample was representative of the population because the emergency nurse students who participated in the current study had already completed the compulsory pre-hospital rotational period, and therefore the results could be generalised to all emergency nurse students.

3.3.3 SAMPLE SIZE

Brink (2006:207) as well as Polit and Beck (2008:765) state a sample is that portion of the population that will represent the population by participating in a study. Burns and Grove (2005:730) define sample as the "*subset of the population that is selected for a study*". In support, Arkava and Lane (1983:27) explain a sample is that element of the population that one considers for inclusion in the study; the sample is that part of the population that is included in the study (Bless & Higson-Smith 2004:84; De Vos, Strydom, Fouché & Delport 2002:199). Bless and Higson-Smith (2004:86) advise the sample must be representative of the whole population which means the researcher has to determine the sample that will best represent the population. This is vital to allow for the results to be accurately generalised.

For the purpose of this study the identified sample consisted of students enrolled for the emergency nursing programme during the period 2008 to 2011 at a tertiary nursing education institution in the Gauteng province. Of this sample, 30 participants had already obtained their qualification in emergency nursing and 15 participants were still busy with the emergency nursing programme. The sample was adequate to provide sufficient in-depth data and was also representative of the accessible population. The final sample size was ***45 participants*** who had all completed the pre-hospital rotational period between 2008 and 2011.

According to Polit and Beck (2008:357), in qualitative designs there are no rules with regard to the sample size. Data saturation serves as a guide for the sample size (Polit & Beck 2008:357). With a descriptive design the sample size tends to be small (Burns & Grove 2011:262). Data saturation is defined by Polit and Beck (2008:765) as "*the collection of qualitative data to the point where a sense of closure is attained ...*". Burns and Grove (2005:358) ascertain that saturation occurs if no additional sampling is able to provide the researcher with new information.

The researcher obtained data from the emergency nurse students through the use of Appreciative Inquiry interview schedules. The original sample size was 45, but since only

34 Appreciative Inquiry interview schedules were received back, six Appreciative Inquiry interviews were added to the data collection techniques in order to ensure data saturation. After four Appreciative Inquiry interviews were conducted no new data were received, confirming data saturation.

3.3.4 DATA COLLECTION

Burns and Grove (2011:535) define data collection as *"the identification of subjects and the precise, systematic gathering of data relevant to the researcher's purpose ...".* The essential process (Brink 2006:141) of data collection is a flowing process where decisions regarding what data to collect evolve continuously within the field under study (Polit & Beck 2008:383). Data collection offers the researcher the opportunity to assess the research design within the various inquiry approaches (Creswell 2007:117).

Burns and Grove's (2011:85) stance is that the construction of life stories to collect data is considered a qualitative method. Therefore, using the Appreciative Inquiry approach for the purpose of the current study was an ideal data collection method since the participants shared stories (narratives) pertaining to their real life experiences in the pre-hospital learning environment. Appreciative Inquiry as a data collection method is explained in more detail in section 3.3.4.1. Burns and Grove (2011:85) and Merriam (2009:85) concur that interviews are another ideal data collection method in qualitative studies whereby the researcher can collect the participants' responses through an interview guide. Appreciative Inquiry interviews are described in more detail in section 3.3.4.2.

For the purpose of triangulation two data collection methods were utilised in this study. Appreciative Inquiry was utilised to obtain the necessary data by means of an Appreciative Inquiry interview schedule. Narratives are discussed in more detail in section 3.3.4.1 as part of the data collection since it fits into Appreciative Inquiry as well as Appreciative Inquiry interviews. Appreciative Inquiry interviews are discussed in section 3.3.4.3.

Emergency nurse students at a tertiary nursing education institution in Gauteng, South Africa, who had already successfully completed the two year programme in emergency nursing from 2008 to 2011, as well as those who were current second year emergency nurse students during this time were requested to participate in the Appreciative Inquiry interview process. The second year emergency nurse students were included because

they had already completed the eight week pre-hospital clinical component of the two year emergency nursing programme.

Initially self reported Appreciative Inquiry interview schedules were handed out to the students participating in the research. With the use of self reported Appreciative Inquiry interview schedules, the participants had to report, in writing, their experience in the pre-hospital learning environment themselves. In other words, the researcher did not report on the experiences. The research and the aim thereof were explained to the participants. Written consent was obtained from the participants prior to the research, and this was placed in an envelope. After consent was obtained, the self reported Appreciative Inquiry interview schedules was given to the participants in a sealed envelope. The participants had two weeks to complete the self reported Appreciative Inquiry interview schedule. The researcher personally collected a sealed container that was placed in the supervisor's office with the completed self reported Appreciative Inquiry interview schedules. After data analysis of the self reported Appreciative Inquiry interview schedules, personal interviews were conducted with the same two groups of emergency nurse students in order to ensure data saturation as well as triangulation of data. Three personal interviews revealed that data saturation was obtained. The complete process is explained in more detail in section 3.3.4.1 and 3.3.4.3.

For the purpose of studying skills and knowledge within the health sciences, a qualitative design may be the ideal option (Henning, Van Rensburg & Smit 2004:2). Therefore, a qualitative design was chosen to evaluate the emergency nurse students' experience of the pre-hospital clinical environment.

3.3.4.1 Narratives

Narratives are stories told by the participants reflecting their own experiences (Denzin & Lincoln 2005:642; Holloway & Freshwater 2007:4; Holloway & Wheeler 2010:193) and are especially useful when one wants to obtain information with regard to feelings, experiences and thoughts; they assist the researcher in making sense of the participants' experiences (Denzin & Lincoln 2005:642; Holloway & Wheeler 2010:193). In addition, narratives help the storyteller to remember the experience, tell her or his story in an orderly manner as she or he has experienced it, and to reflect on the experiences (Holloway & Freshwater 2007:5, 45; Holloway & Wheeler 2010:193).

Narratives support the development of professional knowledge by means of gaining knowledge or increasing existing knowledge which, in turn, can improve care within health care (Holloway & Freshwater 2007:5; Holloway & Wheeler 2010:193). Unique experiences and social context add to the knowledge that is generated through the use of narratives (Holloway & Freshwater 2007:9). It furthermore connects the participants' experiences and feelings to their understanding of circumstances (Holloway & Freshwater, 2007:18) and provides them with the opportunity to explore their own experiences (Holloway & Freshwater 2007:45).

Professional knowledge was developed since the participants had to critically reflect on their experiences. Participants could also think back about the various feelings they may have after their rotation with the pre-hospital learning environment. Therefore, narratives can be viewed as forming part of the self reported Appreciative Inquiry interview schedules, since the participants had to reflect on their own experiences within the pre-hospital learning environment in order to identify that what was best and of value within the pre-hospital learning environment.

3.3.4.2 Appreciative Inquiry Interview Schedule

An Appreciative Inquiry interview schedule was compiled by the researcher with valuable supportive input from supervisors (view Annexure C) as part of the discovery phase of the 5D-Cycle (Cooperrider et al. 2005:87) since this is regarded as the starting point of the inquiry (see Figure 2.2). During the compilation of the Appreciative Inquiry interview schedule, meticulous attention had to be paid to the crafting of unconditional positive questions in order to encourage the participants to be as creative as possible (Cooperrider, et al. 2005:87).

Next, the steps followed during the data collection process are described in detail after which they are summarised in Table 3.1.

- ***Identify the stakeholder***

  The success of the discovery phase requires that the researcher needs to identify the key stakeholders within the organisation (Cooperrider et al. 2005:87). For the purpose of this study, the stakeholders were the emergency nurse students enrolled for the emergency nurse programme. The identification of these stakeholders are important because the researcher needs to decide who will be performing the interviews and with whom. As indicated by these authors, the stakeholders are the people who have significance in and/or a strong impact on the growth and future of

the organisation. Once the stakeholders have been identified they create the interview guide that will be utilised. In the case of this study the identified stakeholders were the researcher together with her two supervisors. This allowed for inimitable perspectives and experiences as suggested by Cooperrider et al. (2005:88). By making use of the Appreciative Inquiry 5D-Cycle, the researcher designed the Appreciative Inquiry interview schedule herself. The supervisors provided valuable support to the researcher and gave productive input in order to make the Appreciative Inquiry interview schedule a success.

- ***Craft an engaging Appreciative Inquiry question***

  The change within the organisation is determined by the questions asked (Cooperrider et al. 2005:88). With the use of Appreciative Inquiry the direction of change is towards the positive and therefore every question has to be stated in the positive and must be set in a fashion that will allow for real experiences to be evoked while drawing the best from the past, as well as to envision the best possibilities for the future. Therefore, the focus of the questions in the current study was based on the 5D-Cycle of Appreciative Inquiry in order to focus on the positive of the pre-hospital learning environment.

- ***Develop the Appreciative Inquiry interview schedule***

  The identified stakeholders have to arrange, develop as well as distribute the set interview guide (Cooperrider et al. 2005:89). According to Cooperrider et al. (2005:92), the Appreciative Inquiry interview schedule has to include the following:

  - background and description to the research;
  - interview instructions;
  - a list of questions;
  - instructions on data collection and recording, and
  - the consent form.

  The Appreciative Inquiry interview schedule constructed by the researcher and her supervisors for this study contained all of the above criteria (view Annexure C).

- ***Collect and organise the data***

  Collecting data and organising the data collection required for the design of the questionnaire called for intensive thought from the researcher since the design involved discovering and evoking important life giving forces in answer to the research questions. Cooperrider et al. (2005:93) suggest that as many interviews as possible should be conducted since inquiry and change is simultaneous, and change can occur at the time of inquiry. A total of 45 self reported Appreciative Inquiry interview schedules were handed out for completion by the participants.

- ***Conduct the Appreciative Inquiry interviews***

  As suggested by Cooperrider et al. (2005:94), the following pointers were followed when the Appreciative Inquiry interviews were conducted:

  - *Explain Appreciative Inquiry*

    Due to the fact that it was an unfamiliar process which could have been awkward for the participants, it was vital to explain the process thoroughly to all the participants. The process was therefore explained both in writing and orally. The researcher explained the process of Appreciative Inquiry to the participants, personally. A participant information leaflet was handed to each participant that explained the process as well.
  - *Respect anonymity*

    All the participants were assured that the data obtained would be kept anonymous. The completed self reported Appreciative Inquiry schedule and consent was kept separately, thereby ensuring anonymity. Data obtained would be compiled according to themes; this guaranteed all the participants anonymity since it would not be possible to associate any names with the stories shared.
  - *Managing the negatives*

    Although the Appreciative Inquiry interview schedule had set questions, participants were able to talk about things that they believed needed to be put in order. The Appreciative Inquiry interview schedules were handed to the participants in groups and they were allowed to discuss their viewpoints. Appreciative Inquiry focuses on the positive; the negative should therefore be managed adequately. Negatives were managed by rephrasing their verbal comments in such a way that the positive can come from the negative. This may include a request to postpone something to be returned to at a later stage. Another option may be to listen to the negative if the participant is very intense about it, while maintaining a caring and affirmative attitude. The last option is to redirect the interview discreetly back to the topic under discussion when the participant deviates too much from it.
  - *Using negative data*

    In the opinion of Cooperrider et al. (2005:96), *"data is data"*. For this reason, they propose that negative data be transformed and recast into positive data. The negative data obtained, was managed in a positive way by utilising this as possible recommendations for the future.
  - *Starting with specific stories – the interview rhythm*

    It is important to start the interview with specifics that are relevant to the participant in order to probe his or her storytelling. The researcher then

naturally has to listen intensively and learn from this experience; the researcher therefore has to be an active listener. However, this was not applicable during the completion of the Appreciative Inquiry interview schedule in this study since it was a written section. The Appreciative Inquiry interview schedule's first question was for the participants to describe their most satisfying or peak experience that was also the focus of the study.

- *Generalising about "life-giving" forces*

  Attempt to guide the participants to think more abstractly about the present time within the organisation with the focus on peak experiences relating to the topic of choice. In this study questions were formulated in the affirmative in order to focus on that singular – or more – peak experience(s) within the pre-hospital learning environment.

- *Listening for themes – "life-giving" factors*

  A good listener will find stories that may contain information relating to the *"life-giving"* factors. Should the given information not contain this vital data, it may be necessary to use probing to elicit this data from the participants. Also, identify themes from the interview that may then be presented in dialogue in the Dream Phase. Identified themes were presented to three participants in an Appreciative Inquiry interview for more clarity and confirmation of themes.

- *Keeping track of the time*

  Due to a fixed schedule the researcher has to keep track of the time. Should more time be required the researcher must ask the participants if they have more time available. It is ideal to pace all questions according to a time schedule. Because the researcher distributed the Appreciative Inquiry interview schedules for completion, there was no time limit allocated to individual interviews in the current study. The researcher collected the completed Appreciative Inquiry interview schedules that were in a sealed container, from her supervisor.

- *Having fun and being yourself – it's a conversation*

  Do not approach the interview as hard work, but look forward to it as an enjoyable journey. It is important to welcome each participant and make her or him feel important. As stated before, it is vital for the researcher to take time to listen. Always value the best in each participant. The researcher has to be humble, always be her- or himself, be a perpetual learner, and always have fun. Therefore, the researcher was enthusiastic about her study.

- ***Sense-making from Appreciative Inquiry data:***
  It is crucial to take time to make sense of the obtained data after all the interviews have been completed. Therefore, the researcher to read each Appreciative Inquiry interview schedule with the utmost concentration. From this, several themes, categories and sub-categories could be identified. No single correct data analysis method exists. In this study the data analysis was creative in nature with the goal to interpret the meaning of what each participant had said.

Table 3.1: Steps of data collection

Number	Description	Implementation	
		Appreciative Inquiry interview schedule	**Appreciative Inquiry interview**
1	Identify stakeholders	Researcher requested supervisors' assistance to compile the Appreciative Inquiry interview schedule, based on the 5D-Cycle.	Researcher requested supervisors' assistance to elaborate on the questions for the Appreciative Inquiry interview.
2	Craft an engaging appreciative question	Possible positive questions were set according to the 5D-Cycle.	
3	Develop the Appreciative Inquiry interview schedule/Appreciative Inquiry interview	The Appreciative Inquiry interview schedule was set according to the suggestions of Coopperrider et al.	The Appreciative Inquiry interview questions was set according to the suggestions of Coopperrider et al. Appreciative Inquiry interview schedule.

Number	Description	Implementation	
		Appreciative Inquiry interview schedule	**Appreciative Inquiry interview**
4	Collect and organise data: • How will the findings be recorded? • How will the data be compiled? • Who will do it?	Appreciative Inquiry interview schedules were distributed by the researcher in sealed envelopes to possible participants to complete in writing. A complete participant information leaflet accompanied each Appreciative Inquiry interview schedule that explained to the participants what was expected of them as well as to obtain their written consent to participate in the study.	The Appreciative Inquiry interview schedule was utilised as guide to conduct the Appreciative Inquiry interviews. The interviews were conducted by an independent, skilled interviewer. Prior to the interviews, the procedure was explained and written consent was obtained on the Appreciative Inquiry interview schedule. Findings were recorded on an audio recorder
5	Conduct interviews	Appreciative Inquiry interview schedules were completed in writing first because of the wide distribution of participants. (view Annexure D) Appreciative Inquiry was explained and anonymity ensured.	Individual Appreciative Inquiry interviews were conducted by an independent interviewer. (view Annexure E) The Appreciative Inquiry interviews were explained and anonymity was ensured.

Number	Description	Implementation	
		Appreciative Inquiry interview schedule	**Appreciative Inquiry interview**
6	Make sense of inquiry data/Data analysis	Completed content analysis of the Appreciative Inquiry interview schedules were analysed by the researcher personally according to themes by utilising the data analysis steps of Tesch (view section 3.3.4). After the Appreciative Inquiry interview schedules had been analysed by the researcher, it was given to an independent coder to analyse in order to verify themes.	The recorded interviews were transcribed by the researcher. This data were then analysed by the researcher. After the researcher's analysis, the transcribed data was given to an independent coder in order to verify the data.

Adapted from Cooperrider et al. (2005:87-97)

The Appreciative Inquiry interview schedules were accompanied by a participant information letter as well as a consent form (view Annexure D). Every individual participant was handed a sealed envelope, by the researcher, containing the Appreciative Inquiry interview guide, the participant information letter as well as the consent form. The participants were requested by the researcher to sign the consent and place it in an envelope, provided by the researcher. Then the participants were requested by the researcher to complete the Appreciative Inquiry interview schedules in their own handwriting. The written consent was therefore kept separate from the Appreciative Inquiry interview schedule, to ensure anonymity. Next, they were requested to place their envelopes containing all the aforementioned documents into a second envelope – supplied by the researcher – seal it, and place it in a sealed container, that was left with the supervisor. The researcher personally collected the sealed container with the completed Appreciative Inquiry interview schedules after a period of two weeks.

Appreciative Inquiry was utilised in two steps during the study. The Definition can be viewed as the research question that was posed. During step 1 the first three phases of the 5D-Cycle was implemented which included Discovery, Dream and Design (view Chapter 4). In step 2, the Destiny/Design phase was implemented (view Chapter 5).

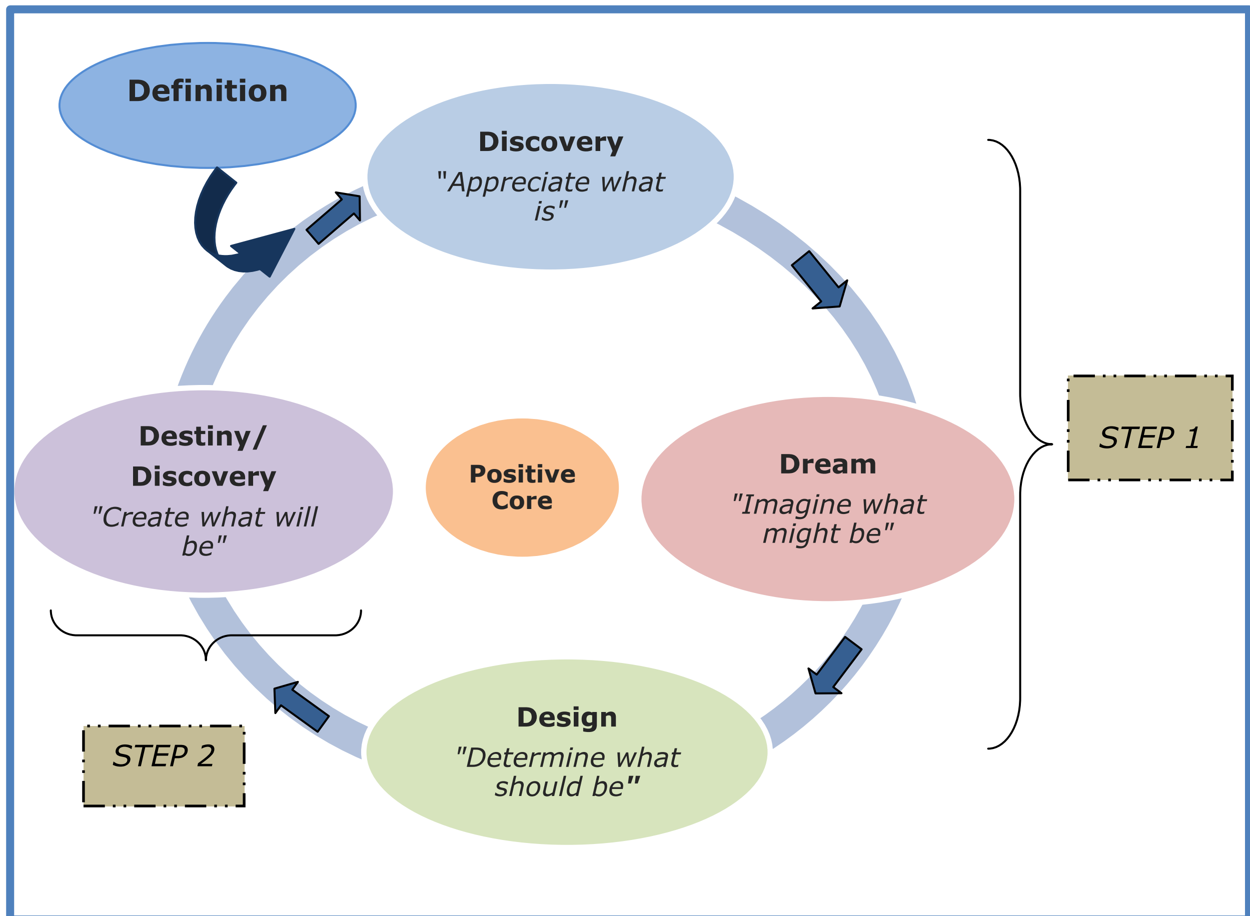

Figure 3.1: Appreciative Inquiry – 5D-Cycle as implemented in the study as adapted from Cooperrider, Whitney and Stavros (2005:5) and Whitney and Trosten-Bloom (2003:6)

3.3.4.3 Appreciative Inquiry interviews

An interview is a conversation in which an interviewer asks questions and listens (Denzin & Lincoln 2005:643). In the current study interviews were added to the data collection methods to improve data saturation and for triangulation purposes. The method of interviews are often utilised to collect data in qualitative designs (Merriam 2009:87). The author states interviews may be one-to-one or in a group with the aim to obtain special information. Furthermore, interviews may be necessary when the researcher cannot observe participants' feelings or behaviour or when the researcher is interested in past events that cannot be replicated (Merriam 2009:88). This was especially true in the current study since the researcher wanted to explore the emergency nurse students' experience within the pre-hospital learning environment. The researcher was not able to accompany every emergency nurse student to observe her or his behaviour or gauge her or his feelings. This would also have been very subjective in nature. The researcher was

especially interested in how the emergency nurse students experienced the pre-hospital learning environment in her or his own unique way.

Narrative interviews, utilising the Appreciative Inquiry interview schedules as a guide, were utilised as it focused more on the life stories of the participants since they had developed some experiences over a period of time (Holloway & Wheeler 2010:204). According to Holloway and Freshwater (2007:75), narratives rely on both the spoken and the written data obtained when participants are asked to share their various professional experiences. By utilising the Appreciative Inquiry interview schedules as a guide towards the Appreciative interviews there were both spoken and written data obtained as suggested by Holloway and Freshwater. One-to-one interviews were easier to conduct because it was not always possible to arrange for all participants to attend a group session due to their distribution within the city as well as their different working hours. The questions were set before the time as recommended by Merriam (2009:90).

The interview guide was a list of predetermined questions drawn up by the researcher with valuable support from the supervisors, based on the guidelines of the 5D-Cycle. Because Appreciative Inquiry also makes use of interviews, the Appreciative Inquiry interview schedule was also utilised in the one-to-one interviews as a guide to the researcher. Appointments were made with identified individuals who conformed to the sample criteria. An Appreciative Inquiry interview schedule was taken to the identified participant to read and complete prior to the interview. After completion of the Appreciative Inquiry interview schedule, it was placed in a sealed envelope that was provided by the researcher. In a private room the one-to-one interview was then conducted, utilising the Appreciative Inquiry interview schedule as an interview tool. With permission from the participants, the interview was recorded on an audio-recorder to ensure no loss of data. The researcher also made short notes on the participants' responses. The participants were asked questions relating to their peak / best experiences within the pre-hospital learning environment. Every individual interview took approximately 30 minutes to conduct.

3.3.4 DATA ANALYSIS

The techniques utilised during the qualitative data collection included both Appreciative Inquiry interview schedules and Appreciative Inquiry interviews. These techniques dictated a strong relationship between data collection and data analysis. Content analysis was conducted where words in the text were classified into chosen categories,

according to its theoretical importance (Burns & Grove 2005:554). The qualitative data analysis principles of Tesch (1990:143-145) were followed since qualitative data were collected. These qualitative data analysis principles as utilised by the researcher are outlined next.

- **Step 1: Get a sense of the whole**

  It was essential to start with this step to present the researcher with crucial background. The researcher started with the first available Appreciative Inquiry interview schedules that became available to her. These Appreciative Inquiry interview schedules were then read carefully and the ideas about the data were written down for further analysis.

- **Step 2: Select a topic**

  An Appreciative Inquiry interview schedule was read with great care in order to select one topic. The researcher then asked the question, 'What is this about?' in order to identify any underlying meanings. Thoughts regarding this question were then written down in the margin. The process was repeated with each Appreciative Inquiry interview schedule that was received back. For the Appreciative Inquiry interviews, the same principle was applied.

- **Step 3: Cluster and compare topics**

  After reading a few Appreciative Inquiry interview schedules, a list was drawn up of all the identified topics and they were then compared. Lines could be drawn between similar topics and similar topics could then be clustered together. The best possible name for a cluster of topics (themes) was chosen. Then a list was made, containing two or three columns that contained the main topics created from the clusters of comparable topics. The second column was made up of the exclusive topics that might have been considered important to the research topic. In the third column the 'left-over' topics were listed.

- **Step 4: Review data**

  After the topics had been identified and clustered, the researcher had to go back to the data in order to ensure that the identified topics' descriptions corresponded to what was found within the data. New topics were also identified during this process. Continuous notes were kept by the researcher that related to the topics that the researcher had identified.

- **Step 5: Refine the data**

  The researcher had to find the most descriptive words for the identified topics that could then be named as the themes. Topics that occurred most were then grouped together in one list, as the themes. Then the researcher had to make a list of distinctive topics that related to the themes as well as a list of less important topics.

- **Step 6: Preliminary analysis**
  After the final coding of data, the researcher had to assemble all the data that belonged within each category in one place; she then performed a preliminary analysis. In other words, the researcher had to assess the collection of information in each category individually. At this stage the researcher had to pay attention to the actual content in order to identify and summarise the content of each category. The researcher looked specifically at the generalisability within the content, the exclusivity within the content, the uncertainties and inconsistencies within the content, and any missing information with regard to the research question.
- **Step 7: Recode existing data**
  The researcher utilised the results of the analysis to be guided towards the next round of data collection, the Appreciative Inquiry interviews. A similar process towards organising the data that covered new aspects of the research topic was followed.

Data analysis was done by the researcher as well as an independent co-data analyser. The Appreciative Inquiry interview schedules were given to the data analyser for analysis. In addition, the data obtained from the one-to-one interviews were transcribed by the researcher. After the data had been transcribed, it was also handed to the data analyser for analysis. The full data analyses together with the findings are described in Chapter 4.

After determining the findings of the study the researcher had an in-depth discussion with the lecturer at the specific tertiary nursing education institution as well as with all the clinical facilitators involved in the clinical accompaniment of the emergency nurse students within the clinical learning environment. An article on the research findings will be published in an accredited emergency nursing journal to ensure that it is available and accessible to other nurses. The research findings as well as the full article will also be published on the specific tertiary nursing education institution's website.

3.4 ESTABLISHING TRUSTWORTHINESS

In qualitative research trustworthiness refers to methodological soundness and adequacy of a study (Holloway & Wheeler 2002:254). Polit and Beck (2008:768) define trustworthiness as the degree of confidence qualitative researchers has in their data. The criteria for trustworthiness as identified by Lincoln and Guba (cited in Polit & Beck 2008:539) include: (i) credibility, (ii) dependability, (iii) confirmability, (iv) transferability

and (v) authenticity. A description of these criteria and their applicability to this study follows next. Thereafter, the strategies utilised to establish the trustworthiness of this study are summarised in Table 3.2. Each of the concepts will be discussed in section 3.4.1 to 3.4.5.

3.4.1 CREDIBILITY

Streubert Speziale and Carpenter (2007:458) state: "*Credibility is demonstrated when participants recognise the reported research findings as their own experiences.*" De Vos, Strydom, Fouché and Delport. (2005:346) associate credibility with the goal to demonstrate that the inquiry was performed with an approach that guarantees accurate identification and description of the subject. Lincoln and Guba (cited in Polit & Beck 2008:539) view credibility as a principal goal of qualitative research and consider it a primary validity criterion. Credibility refers to both the confidence in the accuracy, as well as in the understanding of the data (Polit & Beck 2008:539). Within the context of this study the credibility criterion pertained to the reality obtained from the students' own experiences with regard to the pre-hospital learning environment.

Credibility was ensured by means of prolonged engagement, triangulation, referential adequacy, and thick transcription (Lincoln & Guba 1985:301; Houser 2008:484). As regards prolonged engagement, the researcher was involved in the emergency nursing practice both as a registered nurse and a clinical facilitator. She was also involved as a clinical facilitator within the clinical learning environment. Furthermore, she had worked in various positions within the emergency environment, including the pre-hospital as well as the critical care environment.

Prolonged engagement was ensured by utilising positive open-ended questions in the Appreciative Inquiry interview schedules and Appreciative Inquiry interviews. Using more than one data collection technique ensured triangulation. The techniques included the use of Appreciative Inquiry interview schedules as well as Appreciative Inquiry interviews which contained positive open-ended questions. An audio-recorder was used to record the individual Appreciative Inquiry interviews and verbatim transcriptions of the data ensured referential adequacy. Comprehensive descriptions of the data collection techniques and research methodology were provided thereby ensuring thick transcription.

3.4.2 DEPENDABILITY

De Vos et al. (2005:346) refer to dependability as the researcher's efforts to account for varying circumstances within the chosen phenomenon, including any potential changes in altering conditions within the design. The dependability of qualitative data refers to the faithfulness of data over time and across conditions (Polit & Beck 2008:539). According to Holloway and Wheeler (2002:255), dependability indicates that the study's findings are truthful and reliable. Dependability was ensured by making use of dense descriptions, triangulation, peer examination and code-recode procedures. Comprehensive descriptions of the research methodology were done to confirm dependability. Data analysis involved the researcher as well as an independent code. This ensured that the data analysis of the researcher and that of the independent coder could be compared for similarities during the process of triangulation. Two data collection techniques were utilised during the process of triangulation and included the Appreciative Inquiry Interview schedule and Appreciative Inquiry interviews. Expert supervisors as well as an independent co-coder was utilised for peer examination of the data obtained. Consensus was reached between the researcher, supervisors and independent coder thereby ensuring dependability.

3.4.3 CONFIRMABILITY

De Vos et al. (2005:347) relate confirmability to the concept of objectivity. In other words, the researcher needs to stay objective to the study and also if the data confirm the general findings. Holloway and Wheeler (2010:303) support this view by stating: "*Confirmability has taken the place of the term objectivity*". According to Babbie and Mouton (2001:278), confirmability is the degree to which the findings are the result of the focus of the inquiry and not of the biases of the researcher. It also refers to the objectivity of the data (Polit & Beck 2008:539). Confirmability is further ensured by asking for assistance from the researcher's supervisor and co-coder when the data are audited.

In the current study confirmability was ensured by means of peer examination, bracketing, and a confirmability audit. With the use of an independent coder with an M Cur in Psychiatric Nursing and expert supervisors (PhD), peer examinations of the data obtained were done. Bracketing ensured that valid, reliable data were collected and was done utilising the three steps of bracketing (Houser 2008:484). The steps included the following:

- Looked at and reflected on own viewpoint with regard to the topic;
- Own assumptions to be identified based on the theoretical and practical experience;
- Putting aside all personal bias at all times;

The researcher set aside her own beliefs and knowledge of the phenomenon; in this way she remained open and unbiased and could focus on the participants' experiences and the data collection process itself. The researcher, supervisors and independent coder reached consensus concerning the data which further ensured confirmability in the study. Based on the theoretical background and practical experience of the researcher, own assumptions could therefore be identified. The researcher utilised her own viewpoint with regard to the topic, as advised by Houser (2008:484).

3.4.4 TRANSFERABILITY

Transferability refers to the extent to which the findings can be applied to other contexts or with other respondents (Babbie & Mouton 2001:277; Holloway & Wheeler 2010:303). Because of the contextual design as well as the very precise background described in this study, it will be possible to apply this study to other clinical learning environments. It may also serve as the foundation for studies on the same topic at other tertiary nursing education institutions.

The transferability of data was ensured by making use of purposeful sampling whereby the researcher intentionally selected the study participants. Furthermore, an independent coder was utilised.

3.4.5 AUTHENTICITY

Polit and Beck (2008:540) suggest authenticity is the extent to which the researcher reasonably and truly demonstrates a variety of different realities. They add that, if the transcript invites readers into the experiences, it allows the readers to expand their delicate compassion towards the described issues. A story is used to communicate the sentimental nature of the study participants' experiences. When the story is a true report of their ideas, the study is authentic in nature (Holloway & Wheeler 2010:304). Because an Appreciative Inquiry interview schedule was used in this study, participants were requested to communicate their stories.

Table 3.2 Summary of the strategies utilised to establish the trustworthiness of this study

STRATEGY	ACTIONS	REALISATION IN THE STUDY
Credibility	Prolonged engagement	• The researcher was involved in the emergency nursing practice for 3 years. • The researcher was involved as a clinical facilitator within the clinical learning environment. • The researcher had worked in various positions within the emergency environment, including pre-hospital and critical care. • Positive open-ended questions were used for Appreciative Inquiry interview schedule and • Appreciative Inquiry interviews.
	Triangulation	• Utilisation of more than one data collection technique: ○ Appreciative Inquiry interview schedule ○ Appreciative Inquiry interview • Positive open-ended questions for Appreciative Inquiry interview schedule and Appreciative Inquiry interviews.
	Referential adequacy	• Audiotape recording of individual Appreciative Inquiry interviews. • Verbatim transcription of the Appreciative Inquiry interview data.

STRATEGY	ACTIONS	REALISATION IN THE STUDY
Credibility (continue)	Dense description	• Comprehensive description provided of the data collection techniques. • Research methodology provided.
Transferability	Purposive sampling	• Intentional selection of study participants.
	Dependability audit	• Independent coder utilised.
Dependability	Dense description	• Comprehensive description of the research methodology followed.
	Triangulation	• Independent coder's data analysis compared with the researcher's version in order to identify similarities. • Utilisation of two data collection techniques: Appreciative Inquiry interview schedule and Appreciative Inquiry interview.
	Peer examination	• Review by expert supervisors. • Utilisation of an independent coder.
	Code-recode procedure	• Consensus between the researcher, independent coder, and supervisors.
Confirmability	Peer examination	• Utilisation of an independent coder. • Utilisation of expert supervisors.
	Bracketing	• Researcher's own beliefs set aside. • Researcher remained open to revealed data.
	Confirmability audit	• Consensus between researcher and independent coder. • Utilisation of expert supervisors.

Adapted from Lincoln and Guba (1985:289-331)

3.5 ETHICAL CONSIDERATIONS

Creswell (2003:64) states the researcher should not put the participants at risk and that vulnerable populations are to be respected at all times. Therefore, the researcher needs to have the research plan reviewed by the Research Ethics Committee (Refer to the attached copy of the letter of approval from the Research Ethics Committee of the University of Pretoria to conduct the research entitled: "(E)valuating the pre-hospital learning environment by students enrolled for an emergency nursing programme" (view Annexure A).

The ethical principles that need to be considered for any research study are as follows: (i) principle of respect for persons, (ii) the principle of beneficence and (iii) the principle

of justice (Burns & Grove 2005:180; Denzin & Lincoln 2005:100,715). Included in the principle of respect for persons is the protection of human rights which include: (a) the right to self-termination, (b) the right to privacy, (c) the right to autonomy and self-confidentiality, (d) the right to fair treatment and (e) the right to protection from discomfort and harm (Burns & Grove 2005:181).

Since there was no patient involvement in this study, the ethical considerations pertained more to the rights of the student as participants. The proposal was reviewed by Research Ethics Committee of the Faculty of Health Care Sciences at the University of Pretoria in order to protect the ethical rights of the student participants.

Creswell (2003:64) believes the researcher needs to develop an informed consent form for all study participants to sign prior to their engagement in the research. By doing this, it is recognised that the study participants' rights are protected during the data collection process. Obtaining consent implies that all possible information regarding the purpose, procedure, and aim of the study as well as the advantages and disadvantages of participation in the study have been shared with the participants (Christians 2005:144; De Vos et al. 2005:59). Equally important, Bless and Higson-Smith (2004:100), Babbie (2001:470) as well as Thomas and Smith (2003:21) concur that informed consent is voluntary in nature. The researcher obtained ***informed consent*** in writing from every student participant (view Annexure C & D), prior to data collection, thus making sure that the ethical aspect was adhered to in this study.

Participation in this research was completely ***voluntary***. This means the student participants could choose to participate or decline participation of their own free will. This was in accordance with the stance of De Vos et al. (2005:59) that no participant is to be coerced into participating in any research study. It was explained to all the student participants that they had the right to withdraw from the study at any time, should they wish to do so (De Vos et al. 2005:305). However, no participant exercised his or her right to withdraw from this study at any time. This right is referred to as the ***right to self-determination*** (Burns & Grove 2005:181).

The students who participated in this study knew exactly when and how information would be gathered (view Annexure C & D). It was attempted not to expose the participants to any circumstances that they might not have been prepared for. Without their consent or knowledge, no information was collected; thus their ***right to privacy*** was maintained (Bless & Higson-Smith 2004:100; Burns & Grove 2005:186). The

researcher was available to answer or explain any and all questions the student participants had regarding the study. For this purpose, the researcher's contact details, namely her telephone numbers and e-mail address, was made available to the student participants (view Annexure C & D).

A high priority was maintaining ***confidentiality.*** Burns and Grove (2005:188) state: ***"Confidentiality*** *is the researcher's management of shared by a subject that must not be shared with others without the authorization of the subject."* Therefore, the student participants were assured that none of the information they shared would be made known to anybody and that only the research team, namely the researcher, the independent coder, the transcriber and the study supervisor would have access to the data. The student participants' ***anonymity*** was protected in that their identities could not be linked to their individual stories as advised by Burns and Grove (2005:188). Therefore the informed consent was obtained prior to the completion of the Appreciative Inquiry interview schedules in order to ensure ***anonymity***, since there will then be no connection of the student participants to their completed Appreciative Inquiry interview schedules.

During the course of this study potential harm was minimised and the aim was to add benefits. Participants were not exposed to risks or discomfort. Qualified researchers assisted with the research process by advising her regarding queries or uncertainties. The assistance was provided during the ethical clearance process as well as during data analysis. The study was conducted with the utmost sensitivity where all the student participants and their views were concerned.

3.6 SUMMARY

In this chapter the research method was discussed. Chapter 4 provides an in-depth overview of the research findings. A literature control was conducted to support the research findings.

CHAPTER 4
RESEARCH FINDINGS AND LITERATURE CONTROL

"If you don't like something change it, if you can't change it, change the way you think about it."

- Mary Engelbreit –

4.1 INTRODUCTION

Chapter 3 provided the reader with an in-depth overview of the theoretical framework of the research design and method that was utilised in this study. In Chapter 3 the reader was provided with an in-depth overview of the theoretical framework of the research design and method that was utilised in this study. In Chapter 4 a detailed overview of the research findings is presented. A literature control was conducted to support the research findings.

4.2 OVERVIEW OF RESEARCH FINDINGS

Through the documented reflection from the emergency student nurses four themes were identified that supported the research findings. The four themes are listed below.

- THEME 1: Clinical exposure
- THEME 2: Competencies
- THEME 3: Teamwork
- THEME 4: Future strategies

A summary of the four themes, categories and sub-categories are provided in Table 4.1. The identified four themes are colour coded according to the 5D-Cycle of Appreciative Inquiry (view Chapter 3, Figure 3.1). Some of the categories and sub-categories were identified based on the findings of the Dream phase and the Design phase of the 5D-Cycle and will therefore be discussed together. In Table 4.1 a summary of the themes, categories and sub-categories are provided.

Table 4.1: Summary of themes, categories and sub-categories

THEME	CATEGORIES	SUB-CATEGORIES
Clinical exposure *(view section 4.3)*	Variety of situations *(view section 4.3.1)*	Location *(view Section 4.3.1.1)* Environmental factors *(View section 4.3.1.2)*
	Role players in Emergency medical services *(view Section 4.3.2)*	Paramedics *(view section 4.3.2.1)* Fire department *(view section 4.3.2.2)* Police *(view section 4.3.2.3)*
Competencies (view section 4.4)	Cognitive competencies *(view section 4.4.1)*	Improved understanding *(view section 4.4.1.1)* Pre-hospital environment *(view section 4.4.1.2)* Theory-practice correlation *(view section 4.4.1.3)*
	Psychomotor competencies *(view section 4.4.2)*	Skills *(view section 4.4.2.1)* Practice guidelines *(view section 4.4.2.2)* Independence *(view section 4.4.2.3)*
	Affective competencies *(view section 4.4.3)*	Positive emotions *(view section 4.4.3.1)* Challenging emotions *(view section 4.4.3.2)*
Competencies *(view section 4.4)*	Psychomotor competencies *(view section 4.4.2)*	Skills *(view section 4.4.2.1)*

THEME	CATEGORIES	SUB-CATEGORIES
Teamwork *(view section 4.5)*	Communication *(view section 4.5.1)*	On scene *(view section 4.5.1.1)*
		"Dispatch" *(view section 4.5.1.2)*
Teamwork *(view section 4.5)*	Mutual respect *(view section 4.5.2)*	
Future strategies *(view section 4.6)*	Study guide *(view section 4.6.1)*	
	Study guide *(view section 4.6.1)*	
	Orientation *(view section 4.6.2)*	
Future strategies *(view section 4.6)*	Orientation *(View Section 4.6.2)*	
	Enhanced opportunities *(view section 4.6.3)*	Skills *(view section 4.6.3.1)* Exposure *(view section 4.6.3.2)* Debriefing *(view section 4.6.3.3)*
	Enhanced opportunities *(view section 4.6.3)*	Skills *(view section 4.6.3.1)* Exposure *(view section 4.6.3.2)*

Each theme and related categories and sub-categories are discussed in-depth in sections 4.3 to 4.6.

4.3 THEME 1: CLINICAL EXPOSURE

Clinical exposure was identified by the emergency nurse students who participated in the study as an important component of their training. Data for the first theme, ***Clinical exposure***, is summarised in Table 4.2 and pertain to the clinical exposure of the emergency nurse students in the pre-hospital learning environment. In section 4.3.1 to

4.3.3 each of the categories that relate to the theme are discussed. The categories include a variety of situations and the various role players in the emergency medical services.

Table 4.2: Clinical exposure

THEME	CATEGORIES	SUB-CATOGRIES
Clinical exposure *View section 4.3)*	Variety of situations *(View section 4.3.1)*	Location *(View section 4.3.1.1)* Environmental factors *(View section 4.3.1.2)*
	Role players in Emergency medical services *(View section 4.3.2)*	Paramedics *(View section 4.3.2.1)* Fire department *(View section 4.3.2.2)* Police *(View section 4.3.2.3)*

The following quotations from the emergency nurse students support the study findings.

- "To learn as much as I can..."
- "To learn about the environment..."
- "The whole experience was memorable..."
- "...in every environment you have to learn something..."
- "...pre-hospital beneficial and informative..."
- "...maximum exposure to all types of emergencies in the field..."

- ***Literature control***

Clinical is defined as "*relating to the observation and treatment of patients"* (*Oxford paperback dictionary and thesaurus 2007*). ***Exposure*** is defined as: *"The condition of being presented to view or made known" (Merriam Webster on-line dictionary, 2011).*

Therefore, with regard to this study, ***Clinical exposure*** was defined *as the presentation to observation and treatment of patients by emergency nurse students.*

According to Meyer and Van Niekerk (2008:65), students' quality of learning is enhanced when they work in the clinical setting because this setting is vital to support them in their growth towards future quality practices as registered nurses. Jerlock, Falk and

Severinsson (2003:219) opine that clinical exposure is crucial for adequate basic and advanced nursing training. Lee and French's (1997:460) view is that clinical exposure can present students with potential learning opportunities and, additionally, they believe that clinical exposure will only thrive if the nurse leaders are qualified teachers and the clinical staff is willing and able to help the students. On the other hand, Hoffman and Donaldson (2004:448) warn that clinical exposure can also fill the student with tension. But, as Baglin and Rugg (2010:145) point out, exposure to the clinical setting can significantly improve the students' enthusiasm and maturity towards their professional identities since it allows them to focus on real problems within the professional practice context (Spencer 2003:591).

Bryant et al. (2003:790) state the clinical experiences of a student are essential for his or her clinical education. Christensen (2009:93) is of the opinion that work-based learning may give structure to the learning experiences of a nurse as it will enable him or her to focus on both theory and practice. Clinical exposure is a journey into the unknown with new experiences and interesting learning situations (Peyrovi et al. 2005:138). According to Stockhausen (2005:8), the clinical environment is the area where students develop their real experience with regard to the profession. Clinical exposure may lead to competent nurses if the clinical placement was effective (Levett-Jones & Lathlean 2008:104). In other words, the effective exposure of emergency nurse students to the pre-hospital clinical environment will result in competent emergency nurses if the placement was effective.

4.3.1 VARIETY OF SITUATIONS

The first category that was identified in the theme ***Clinical exposure*** was a variety of situations, which suggest that the emergency nurse students had to work in different locations and in different environmental factors. Both the locations and environmental factors/circumstances are discussed in sections 4.3.1.1 and 4.3.1.2. The following quotations from the emergency nurse students support the study findings.

- "Being exposed to all types of emergencies..."
- "...most interesting calls..."
- "...exposed to scenes on the road as well as scenes in the home..."

- ***Literature control***

In South Africa the remoteness of some locations and areas, a poor infrastructure and the geographical landscape which can vary between being mountainous to deep valleys and ravines, can hamper emergency services. Goosen et al. (2003:705) also mention the vast distances that have to be travelled in this country to reach many of the urban areas as obstacles in the way of rendering emergency services.

Furthermore, emergency nurses in South Africa are exposed to various critical incidents accompanied by life-threatening trauma (Brysiewichz & Bruce 2008:128-129). The critical incidents may include anything from alcohol or drug intoxication to penetrating trauma, falls, respiratory problems and neck injuries (Brysiewichz & Bruce 2008:129; Goosen et al. 2003:705; Gunnarsson & Stomberg 2009:85; Melby & Ryan 2005:1146). Penetrating injuries due to violence are some typical patient injuries in South Africa (Brysiewicz 2001:130). In brief, because of the diversity in critical injury cases, it can be reasoned that the emergency nurse students can become more experienced; therefore, they will be able to undertake more specialised activities (MacFarlane, Van Loggerenberg & Kloeck 2005:148). These authors also posit that the staff, especially in an emergency centre, may work in difficult situations which, for example, can include abuse and violence. Since little supporting evidence exists regarding the pre-hospital environment to support the variety of situations, it is possible that this can also apply to the pre-hospital environment.

Students may encounter a wide range of complex and challenging clinical conditions in the various clinical environments (Boyle et al. 2008, p. 1; Bryant et al. 2003:739; Melby 2001:733). It can therefore be assumed that the clinical learning environment also includes the pre-hospital learning environment. Gutierrez and Soto (2002:1183) emphasise that gaining clinical skills and exposure in a variety of clinical situations can be an asset to any person working in the health care environment. Pearcy and Elliot (2004:384) found that being exposed to a variety of experiences gave students the opportunity to draw their own conclusions with regard to nursing. Similarly, to Melby (2000:642; 2001:733) it was apparent that students appreciated the diverse situations they attended to which varied from a selection of non-emergency incidents to severe trauma. The author concludes this caused the students to realise that the pre-hospital environment is an unpredictable environment. Papp et al. (2003:267) agree with Melby that optimal learning may be difficult to plan, since the clinical environment is constantly

changing and is sometimes even unpredictable. It is important to realise that it is vital to be able to recognise and manage a variety of injuries and illnesses (De Robertis, Tomins & Knape 2010:223; Svensson & Fridlund 2008:36). Reported cases that paramedics have to respond to include, for example, major injuries in patients entrapped at the scene of an accident (Carney 1999:761). The entrapment may be either in a motor vehicle or it may involve a machine. High speed and reckless driving can be associated with the entrapment of patients in motor vehicle accidents (Brysiewicz 2001:130; Carney 1999:761). Inadequate public transportation and lawlessness in South Africa account for deaths in multiple motor vehicle accidents (Brysiewicz 2001:130). Many traffic accidents involve pedestrians, alcohol abuse by the driver and poor road conditions (Bowley et al. 2002:801; Brysiewicz 2001:130; Goosen et al. 2003:705). Thus, as Rhodes and Curran (2005:257) ascertain, exposure to a variety of situations may lead to paramedics becoming more proficient and experienced.

4.3.1.1 Locations

According to Lloyd (2008:409), the variety of situations where the ambulance services render a service can often be hazardous and unknown and therefore they will need experience in many different environments. The level of care is determined by the type of injury. Liberman, Mulder and Sampalis (2000:585) opine that patients presenting with penetrating trauma may benefit less from advanced life support when compared to patients presenting with blunt trauma. The authors divide trauma patients into three groups, namely: (i) fatally injured with no chance of survival, (ii) salvageable with timely management, and (iii) will do well irrespective of the pre-hospital management. The variety of situations that the paramedics are confronted with includes multiple trauma, head injuries, domestic and street violence, physiological diseases, endotracheal intubation, and multiple interventions (Bowley et al. 2002:800; Flabouris 2003:851; Melby 2001:733).

At times the emergency nurse students were exposed to situations that were more controlled, such as being at a patient's house, but mostly it was uncontrolled situations because it occurred on railway tracks and on open roads. The following quotations from the emergency nurse students support the study findings.

- "...disorganised and unusual geographical locations..."
- "...we had to climb up and down the platform and run on the tracks [railway tracks] ..."
- "...CPR [cardio-pulmonary resuscitation] was performed on the road..."
- "Resuscitation on the road is so much different to resus [resuscitation] in the hospital..."

- ***Literature control***

Location is defined as *"a particular place"* (*Longman dictionary of contemporary English 1987:615).* It became clear that the different geographical locations, although sometimes extraordinary in nature, was a satisfying learning experience opportunity for the emergency nurse students, especially since the time factor to reach the emergency site to render emergency services was critically important. Literature supports the variety of situations that one can come across in trauma situations. As Parsell and Bligh (1998:527) point out, students in the healthcare profession often learn more in a combination of environments, in other words, in the clinical context, in their speciality units as well as in a variety of sites.

According to Moeketsi (2000: [1]) (Conference) road traffic collisions and the trauma that accompanies these collisions, appears to be a complex problem in South Africa. Road traffic accidents can be a confusing, uncontrolled and chaotic environment (Coats & Davies 2002:1135). Cole and Ramirez (1997:114) note emergency nurse students can gain valuable experience in the pre-hospital setting through rotation in the clinical setting as well as in aviation transport, while (Lischke et al. 2001:77) state when an emergency situation arises in mountainous areas with accompanying climate changes, it can be very challenging to reach the site in order to render emergency services and to evacuate the patients by helicopter. In a study done by Suserud and Haljamäe (1997:156) participants described two major incidents, namely a railway accident and a tram accident, where emergency services were required. Paramedics train to manage situations in any location; it may include rescue operations in deep water and high angle rescue as well as vehicle extrication (Flabouris 2003:848).

4.3.1.2 Environmental factors

Environmental factors had an influence on the learning opportunities of the emergency nurse students. Sometimes they had to work in extreme situations which included bad weather, temperature differences, and poor light. The following quotations from the emergency nurse students support the study findings.

- "...in the rain..."
- "...while we had to work in extreme circumstances..."
- "...working in temperature extremes as well as inadequate light..."

- ***Literature control***

Environment is defined as *"the physical and social conditions in which people live ..."* (*Longman dictionary of contemporary English* 1987) while ***factor*** means *"any of the forces, conditions, influences, etc., that act with others to bring about a result"* (*Longman dictionary of contemporary English* 1987). For the purpose of this research, ***environmental factors*** were used to indicate *the influences that bring about results within a physical or social condition.*

Pre-hospital factors such as poor lighting create a challenge to the pre-hospital personnel in the effective assessment and management of a patient (Eckstein et al. 2000:643). In a study by Gunnarsson and Stomberg (2009:85) nurses described challenging situations, for example a fire, where they had to assist. Other environmental factors that may cause reduced performance include vibration and environmental noises (Wright et al. 2006:3). In addition, ambulance personnel often have to work under extreme conditions without the support of a medical doctor (Kotze 1990:321). Schull et al. (2003:709) mention ambulances sometimes have to travel through dense traffic and extreme weather to reach an emergency site; it is then obvious that the ambulance staff will work in extreme weather as well. Goosen et al. (2003:705) add in informal urban areas or settlements, the limited street lights available may make it very difficult for the emergency staff to manage emergency services successfully.

4.3.2 ROLE PLAYERS IN EMERGENCY MEDICAL SERVICES

From the research findings it was apparent that there are various role players in the pre-hospital environment and that each of them have an important role and function to fulfil. Some of the emergency nurse students agreed that the work of the emergency medical services needs to be considered as a learning opportunity. The three main role players identified with regard to the work of the emergency medical services, namely paramedics, the fire brigade and the police, are discussed individually in sections 4.3.2.1 to 4.3.2.3. The following quotations from the emergency nurse students support the study findings.

- "...pre-hospital personnel, ... it was easy for me..."
- "...learning from experienced CCA's [critical care assistants]
- "...fire brigade and all involved..."

- ***Literature control***

It is extremely important to have qualified personnel on the scene to assist when there is a major emergency incident (Suserud & Haljamäe 1997:155). But, between the fire department and the police department, for example, it is just as important that scene command is established to ensure there is one person in charge of the situation (Yeung, Chan & Ho 2002:90). It is routine that the fire department, the police department as well as ambulance services have to attend every trauma call to ensure that pre-hospital medical care is provided at various levels (Band et al. 2010:35; Malcolm Smith & Conn 2009:25). According to Carney (1999:763), a close working relationship with the fire department is important for patient extrication.

4.3.2.1 Paramedics

According to the emergency nurse students in this study, the main role players in the pre-hospital environment were the paramedics; the emergency nurse students all agreed that they learned various skills from the paramedics. Some paramedics allowed the emergency nurse students to perform the skills themselves. The following quotations from the emergency nurse students support the study findings.

- "The paramedic gave me the option..."
- "The paramedics know how to handle them..."
- "...and the way all paramedics ... work together..."
- "...having the most qualified paramedics on the scene..."

- ***Literature control***

A ***paramedic*** is defined as "*specially trained medical technician licensed to provide a wide range of emergency services (as defibrillation and the intravenous administration of drugs) before or during transportation to a hospital*" (*Merriam-Webster on-line dictionary, 2011*). According to literature, one of the paramedic's roles on scene is to rapidly institute scene safety (Eckstein et al. 2000:643). The authors also state the paramedics need to perform the primary survey and then ensure rapid, safe transportation of the patient to the nearest appropriate facility, stressing the fact that the primary survey, which includes basic airway support and cervical spine control, are some of the skills that the paramedic should be able to perform. Some of the advanced skills the paramedic should perform during transportation include endotracheal intubation and intravenous fluid administration (Eckstein et al. 2000:643; Haas & Nathens 2008:para. 3 under the

heading Introduction). In addition, Haas and Nathens (2008: para. 3 under the heading Introduction) opine that advanced life support providers, who includes the paramedics, have to be able to perform a variety of procedures in the pre-hospital environment.

In the view of Jamali (2008, p. 102) the paramedics and emergency nurses must be selected and trained in the principles of pre-hospital basic care. In addition, both these groups should also receive training on safe rescue, patient stabilisation as well as the safe transport of the trauma patient to the nearest appropriate facility (Callaham & Madsen 1996:639; Jamali 2008, p. 102). Trained pre-hospital personnel are responsible for accurate triage of patients in the pre-hospital environment (Crawford et al. 2004:26). In South Africa, the ambulance personnel play a pivotal role in the pre-hospital management of the ill and injured (Kotze 1990:320).

4.3.2.2 Fire department

From the research findings it became clear that the fire departments' involvement in many accident scenes were of great value. They assisted with extrication as well as scene safety. The following quotations from the emergency nurse students support the study findings.

- "...learning about scene safety from fire officers..."
- "…fire department also on scene, ensuring the environment is free of hazards..."
- "...while the door is being cut open by the fire department..."
- "...fire department supported us..."

- ***Literature control***

The ***fire department*** is defined as "*an organization for preventing or extinguishing fires; especially: a government division (as in a municipality) having these duties*" (*Merriam-Webster on-line dictionary 2011*). The fire department officer who is in charge of a scene is also responsible for the scene's safety and management (Forrest & Van der Velde 2005:303). According to Malcolm Smith & Conn (2009:523), the fire department attends to every trauma call as a routine. Communication with the senior fire officer is important after the primary survey has been completed in order to coordinate the extrication of the victims who are trapped in a motor vehicle (Coats & Davies 2002:1137). The fire department is also trained in triage and basic ambulance assistance in order to maximise the survivability of the victims (Clarke 1998:369; Schenker et al. 2006:571; Stiell et al. 1999:46).

At hazardous scenes, the fire department is responsible to work in the hazardous area and for supervision during the management of the victims in the hazardous area (Crawford et al. 2004:26; Yeung et al. 2002:92). Furthermore, the fire department is in charge of coordinating scene safety together with the paramedics (Crawford et al. 2004:26; Mackenzie & Sutcliffe 2000:40). According to Mackenzie and Sutcliffe (2000:40), it is the fire department's responsibility to control the traffic at an accident scene as well as gaining access to trapped victims. Furthermore, the authors advise that the fire department has to ensure that fire fighting equipment is always ready and available for use as well as identifying the possible sources that ignited the fire.

4.3.2.3 Police

The third important role player in the pre-hospital environment is the police department, since they also assist in scene safety. From the findings, it also appeared as if the police department assisted in the dispatch of paramedics. The following quotations from the emergency nurse students support the study findings.

- "...respond on a call from the police squad..."
- "...traffic was converted by metro police..."
- "It was closed off by the police..."
- "The police barricaded the road to ensure ..."

- ***Literature control***

The ***police*** are defined as "*to control (something) by making sure that rules and regulations are being followed" (Learner's dictionary, via the Merriam-Webster's on-line dictionary 2011*). The police department, similar to the fire department, is also involved in securing scene safety as well as scene investigation (Band et al. 2010:35). According to Forrest and Van der Velde (2005:303), the police department controls an accident scene together with the fire department, and they communicate continuously with the paramedics on the scene. This view is supported by Coats and Davies (2002:1137), Smith and Conn (2009:523), and Yeung et al. (2002:90). Another focus area of the police department at the scene of an accident is traffic control and to clear the way for emergency vehicles which arrive and leave the scene (Suserud & Haljamäe 1997:157). In addition to scene safety and communication, Stiell et al. (1999:46) state the police can also assist with cardio-pulmonary resuscitation.

4.4 THEME 2: COMPETENCIES

Due to the important work that the emergency nurse has to perform in a clinical setting, it is vital that she or he learns new competencies. The emergency nurse students identified competencies as an essential learning opportunity in the pre-hospital learning environment. All three components of competencies were identified and included cognitive competencies, psychomotor competencies, and affective competencies. Each of the three components is discussed separately in sections 4.4.1 to 4.4.3.

Table 4.3: Competencies

THEME	CATEGORIES	SUB-CATEGORIES
Competencies (view section 4.4)	Cognitive competencies *(view section 4.4.1)*	Improved understanding *(view section 4.4.1.1)* Pre-hospital environment *(view section 4.4.1.2)* Theory-practice correlation *(view section 4.4.1.3)*
	Psychomotor competencies *(view section 4.4.2)*	Skills *(view section 4.4.2.1)* Practice guidelines *(view section 4.4.2.2)* Independence *(view section 4.4.2.3)*
	Affective competencies *(view section 4.4.3)*	Positive emotions *(view section 4.4.3.1)* Challenging emotions *(view section 4.4.3.2)*
Competencies *(view section 4.4)*	Psychomotor competencies *(view section 4.4.2)*	Skills *(view section 4.4.2.1)*

Quotations that support the study findings and competency themes are listed next.

- "...for their skills and abilities to manage..."
- "...also learnt the importance of mechanism of injury..."
- "...being able to do more..."
- "...you have both the theoretical and practical knowledge..."

- ***Literature control***

Competencies are defined as "*a student's abilities to recognise as well define potential problems within their speciality"* (Kirschner 2002:1). This is supported by Boyatzis (2008:6) who views a ***competency*** as 'an ability' or 'a capability'. Learning begins with the student's own expectations, knowledge, attitudes and skills (Considine & Martin 2005:37; Ham & O'Rourke 2004:139; Parsell & Bligh 1998:523). Baglin and Rugg (2010:145) are of the opinion that it is of the essence in the nursing profession to obtain competence in concrete tasks. The authors further opine that, due to the progressively more multifaceted nature of the healthcare profession, there should be a consequent advancement in the span of a nurse's knowledge, skills and attitudes. In addition, clinical placement allows for better competence (Cowan, Norman & Coopamah 2007:26; Edwards et al. 2004:254). According to Chung-Heung and French (1997:460), clinical placement can only be successful if the clinical curriculum supports the nurse to master the knowledge and skills that is embedded in the clinical setting.

Three areas of competencies, namely the cognitive, psychomotor and affective domains, were identified by Bloom and colleagues (Bloom et al. 1956:7) and Kraska (2008:61). The clinical learning environment is an essential component in the acquisition of the various competencies; Bloom and colleagues acknowledge it is concerned with the cognitive (knowledge), psychomotor (skills) and affective (attitudes, values and attributes) domains needed to become a safe nurse practitioner (Andrich 2002:41; Chan 2001:447; Chan, 2002b:518; Chan 2004:1; Chan & Ip 2006:683; Chesser-Smyth 2005:321; Cowan et al. 2007:26; Melby 2000:641; Midgley 2006:339; Levett-Jones & Lathlean 2008:104). The student then has to combine these competencies in order to respond to a patient's individual needs and ensure the latter's safety (Chan 2001:448; Chan 2002b:518; Chan 2004:1; 2006:339). Emergency nurses need unique knowledge, skills and experience (Cole & Ramirez 1997:112).

4.4.1 COGNITIVE COMPETENCIES

The first competencies identified by the emergency nurse students were the cognitive competencies. Cognitive competencies were identified as important in the Discovery phase of Appreciative Inquiry as well as in the Dream phase. Three main cognitive competencies were isolated in the research findings and are discussed in sections 4.4.1.1 to 4.4.1.3. The following quotations from the emergency nurse students support the study findings.

- "...appreciation for mechanism of injury..."
- "...understanding of how to manage the patient..."
- "...in every environment you learned something..."
- "Knowing of medication..."
- "...didn't have the theory knowledge background for skills practised pre-hospital..."

- ***Literature control***

Cognition is viewed by Maree & Fraser (2004:21) as 'knowledge'. The authors view cognition as thinking and the method that can be connected to the attainment, organisation, retention and utilisation of knowledge. **Knowledge** is defined by Bloom et al. (1956:62) as *"those behaviours and test situations which emphasizes the remembering, either by recognition or recall ... ."* Therefore, ***cognitive competencies*** relate to the acquisition of knowledge (Boyatzis 2008:7; Hinchliff 2004:65). In other words, cognitive competencies are the intellectual component of the various competencies (Andrich 2002:41). Nursing, as a discipline, represents a wide range of knowledge (Carr 2005:333). According to Mashaba and Brink (1994:67), the cognitive field mainly focuses on the transmission of both knowledge and skills and engages in a logical and critical thinking process. Therefore, cognition can only be addressed through reasoning; it is more of a mind matter. Hinchliff (2004:11) view cognitive learning as a process that requires the active processing of information. Therefore, there is a mix of existing knowledge with that which was previously learned in order to create new knowledge.

The cognitive domain includes various objectives that deal with the recognition of knowledge as well as with the development of one's intellect (Bloom et al. 1956:7; Bloom et al. 1964:6). In addition, Bloom et al. (1956:18, 30; 1964:6) identify six levels of the cognitive field, ranging from simple to more complex, as illustrated in Table 4.4. The aim

of the classification is that each level integrates with the previous level (Andrich 2002:42). Action verbs are utilised in Bloom's taxonomy and are a key feature thereof (Andrich 2002:44). According to Bloom et al. (1956:28), the acquisition of knowledge is a common objective in education. Therefore, the authors state that the student can provide the necessary evidence of remembering or recalling an idea. Knowledge and comprehension are viewed as lower levels of cognition whereas application, analysis, synthesis and evaluation are regarded as higher levels of cognition (Bart 2008:111; Petkovich & Bart 2008:592).

Table 4.4: Levels of the cognitive field (Bloom's taxonomy)

LEVEL	COGNITIVE FIELD
Level 1	Knowledge
Level 2	Understanding/Comprehension
Level 3	Application
Level 4	Analysis
Level 5	Synthesis
Level 6	Evaluation

Adapted from Bloom et al. (1956:18) and Carl (2009:82)

Emergency nurse students need to be acquainted with all the levels of knowledge, according to Carper's framework of knowledge (taxonomy), before care can be performed (Jackson 2005:119). Therefore, knowledge with a firm theoretical foundation that is relevant to the clinical situation is needed (Tiwari et al. 2005:300). Carper's taxonomy allows for patterns of knowledge to include: (i) empirical, (ii) aesthetic, (iii) personal, and (iv) ethical sources. This framework allows for influences from evidence-based practice, one's insight, prior learning, and applicable personal experiences. Empirical knowledge is based on the scientific theories of the nursing discipline. Aesthetic knowledge is the art of nursing and includes the acquisition and application of the nurses' personal knowledge, traditions and intuition. Personal knowledge is the individual behaviours, knowledge and experience that the nurse utilises daily. Ethical knowledge includes the nurses' moral component with regard to knowledge and is considered a vital element for nursing (Carper 1978:14, 16, 19-20; Knight, Moule & Desbottes 2000:120).

According to the Maslow hierarchy of needs, students have the need to know and understand (Mellish, Brink & Paton 2005:35). The authors are of the opinion that the more a student's needs are satisfied to know and understand, the more the student wants to know and understand (see Figure 4.1). They assert the main aim of education

is to guide a student towards the goal of becoming all that the student is capable of becoming. Learning is broken down into three phases, namely, helping students learn knowledge, helping the students to develop the application of this knowledge, and the reason for utilising this knowledge (Boyatzis & Saatcioglu 2008:93). Figure 4.1 is an illustration of the Maslow hierarchy of needs where 'need to know and understand' is important for the purpose of this study.

A study conducted by Bahn (2007:720) emphasised that a benefit of further studies included the acquirement of more knowledge. Shared learning initiatives increase knowledge of certain topics (Parsell & Bligh 1998:526). Participants in a study done by Chesser-Smyth (2005:324) asserted that their experiences in the clinical learning environment assisted them with gaining new knowledge; Cole and Ramirez (1997:113) point out that various clinical opportunities present emergency nurse students with the opportunity to gain necessary and essential knowledge. The emergency nurse students enter the clinical learning environment armed with the relevant theoretical knowledge of the nursing profession (Stockhausen 2005:9). Subsequently, the clinical learning environment, combined with scientific knowledge, allows these students to utilise and build on existing knowledge (Crooks et al. 2005:365; Gardner et al. 2004:149; Häggman-Laitila et al. 2007:382). The challenges that the students face in the clinical learning environment may encourage them to progress more in their learning (Gardner et al. 2004:149). Interaction with more skilled and experienced personnel assists with the development of especially cognitive competencies (Mclean et al. 2006:99). In brief, the end result on completion of a course for nurses is undoubtedly improved, changed knowledge (Tippett 2004:40).

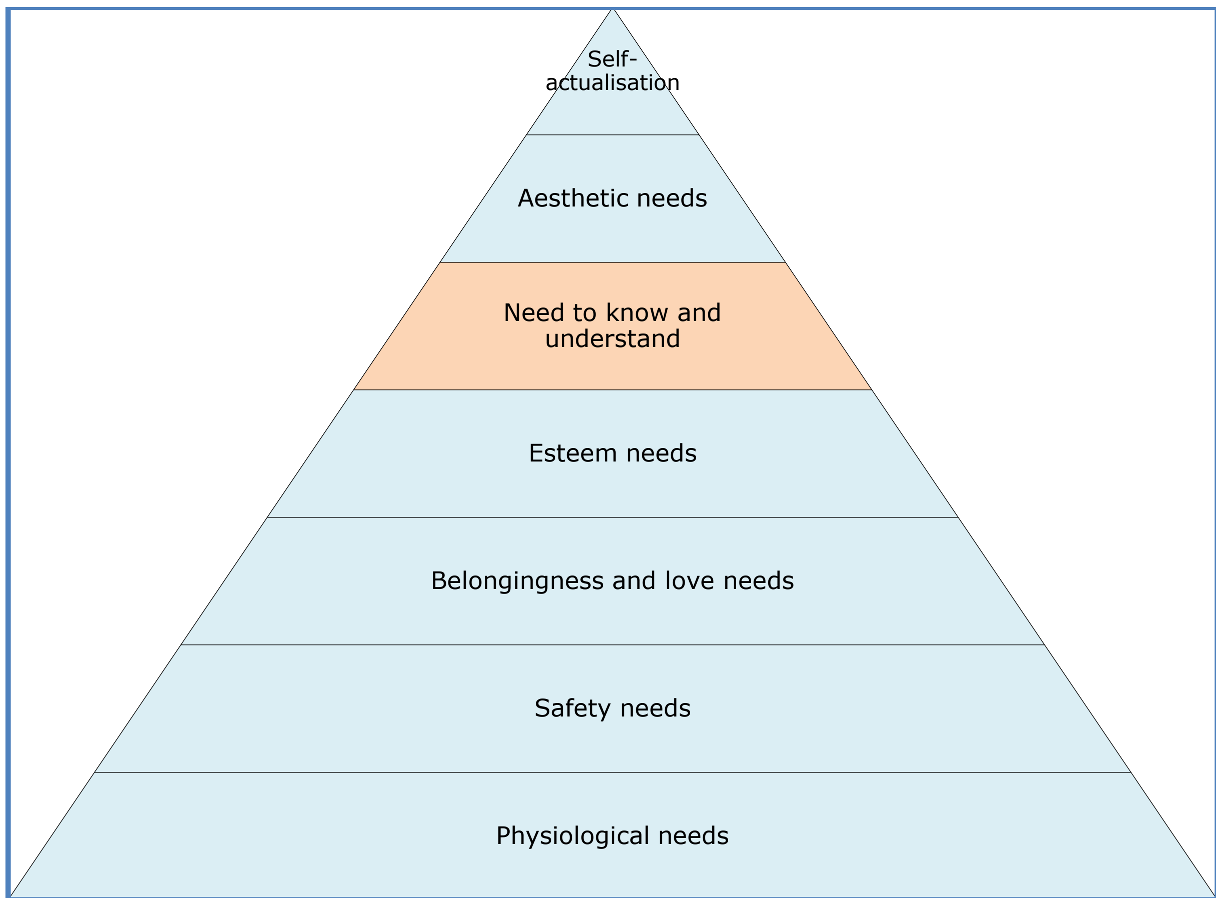

Figure 4.1: Maslow's hierarchy of needs as adapted from Mellish, Brink and Paton (2005:35)

4.4.1.1 Improved understanding

From the research findings it was clear that the emergency nurse students had an improved understanding of various pre-hospital issues. This included where the patient came from and the mechanism of injury. The following quotations from the emergency nurse students support the study findings.

- "...see where my patient come from ..."
- "...see the time and effort it takes to get them to the hospital..."
- "...understand where the patients come from ..."
- "...understand the situations of the EMS [emergency medical services] and better understanding of their work environment..."
- "To see where patients is coming from before they arrive at casualty and to understand the pre-hospital environment..."
- "Being able to understand the EMS [emergency medical service] setting better..."

- ***Literature control***

Understanding (or comprehension) is the second level in the cognitive domain according to Bloom's taxonomy as illustrated in Table 4.4. According to Chan (2004:9), and supported by Arbon (2004:152), clinical education focuses on the knowing and understanding instead of the doing. By combining both classroom teaching and the clinical learning environment it provides the student to better understand their multi-disciplinary roles (Morison & Jenkins 2007:451). Through clinical placement students develop an increased understanding with regard to their learning career (Arbon 2004:152; Baglin & Rugg 2010:147). In addition, students develop a better understanding for policies, procedures and practice guidelines (Baglin & Rugg 2010:147). Education session in the clinical learning environment can assist students to have a better understanding of the nursing practice (Koh 2002:37). Clinical placement allows for an improved understanding of the pre-hospital emergency team as well as the care that they provide, including the difficulties that is encountered in the pre-hospital environment (Melby 2000:642; 2001:730, 735). In addition, shared learning enhances the understanding of professional roles in other professions as well as the responsibilities (Mclean et al. 2006: 94; Parsell & Bligh 1998:526). Consequently, this view is applicable as regards the emergency nurses' experience towards the paramedics' profession as well.

A benefit of improved understanding is the acknowledgement of the unique characteristics of the various role players (Arbon 2004:153). Improved understanding may work both ways, since the emergency nurse student brings her or his knowledge of the in-hospital environment to the pre-hospital environment. According to Arbon (2004:153), nurses bring their understanding with regard to people and situations in their work environment to the practice. The author's stance is that the clinical environment where the experience is gained may influence the nurse's understanding. Furthermore, as the nurse gains more experience, more value can be placed on the understanding about the world of others. If this is applicable to a nurse in general, it is just as relevant to the emergency nurse. Training in a team setting can improve the understanding of teamwork (Wallin et al. 2007:47). Clinical experience allows for the acquisition of patient understanding, discipline understanding as well as of practice understanding (Jackson 2005:114; Salmon & Jones 2000:20; Stockhausen 2005:10). It becomes important in the learning context to understand how everything works in the context of the profession (Hoffman & Donaldson 2004:449).

4.4.1.2 Pre-hospital environment

The study findings showed clearly that the emergency nurse students learned more about the pre-hospital environment as a learning environment. The following quotations from the emergency nurse students support the study findings.

- "...learning about scene safety..."
- "...how pre-hospital management affects nursing care in the trauma unit..."
- "...prompt treatment which may result in reduction of mortality..."
- "To learn about their environment..."
- "...enjoy the environment..."

- ***Literature control***

The clinical learning environment is an environment rich with meaningful learning opportunities where the student can actively participate (Andrews & Roberts 2003:476). However, the pre-hospital environment is also a very unpredictable environment (Flabouris 2003:852; Melby 2001:733). Although Carney (1999:757) mentions pre-hospital care is mainly provided by ambulance personnel in an ambulance and a paramedic in a response car, Suserud (2001:56) points out that there are two main types of pre-hospital environments: one is the caring and transportation of the ill and injured and the other pre-hospital environment is more resuscitative activities at major incidents. That which is learned by a student as well as the student's response towards learning is largely affected by the learning environment (Kilminster & Jolly 2000:830). The pre-hospital environment, including the care provided, has changed from the isolated fire departments that only provided basic medical care to a complete and sophisticated system that can respond to various situations (MacFarlane et al. 2005:145).

In South Africa the pre-hospital personnel need to provide a variety of emergency care. According to Clarke (1998:369), the pre-hospital services in Gauteng, South Africa, are well-managed and organised. Since pre-hospital care is an important component of holistic care, it has the potential to be integrated with other health services (O'Meara 2003:199) and therefore advanced training in the pre-hospital environment must be recognised (Suserud & Haljamäe 1999:20). For nursing staff who mainly train in a hospital environment, the pre-hospital environment can be very hostile and uncertain (Gunnarson & Stomberg 2009:88; Rainer & De Villiers Smit 2003:14). Therefore, the hospital personnel need to gain a portion of their experience in the pre-hospital environment. Since there is limited literature available with regard to the value of nurses

training in the pre-hospital environment, nurses may form part of the hospital personnel that Rainer and De Villiers Smit refer to.

4.4.1.3 Theory-practice correlation

Through the research findings it became apparent that the emergency nurse students could correlate theory to practice. Theory-practice correlation is always an important aspect in the nursing profession. The following quotations from the emergency nurse students support the study findings.

- "...doing what we were trained to do..."
- "To think critically in emergency situations..."
- "...maintain and protect the airway and protection of C-spine [cervical spine]..."
- "Proper handling of an injured patient and secure protection after extracted ... as well as the monitoring of patient on the way to hospital..."
- "The triage of the patient on scene..."
- "I was able to develop assessment skills – was able to think for myself..."

- ***Literature control***

Theory is defined as "the analysis of a set of facts in their relation to one another" (*Merriam-Webster's online dictionary* 2011). Theory and practice are not interchangeable (Boyle et al. 2008, p. 1; Peyrovi et al. 2005:139; Upton 1999:549). Clinical placement is an integral part of nursing education since it allows the nursing student to correlate theory with practice (Baglin & Rugg 2010:145; Jerlock & Severinsson 2003:221; Sendir & Acaroglu 2008:737; Stockhausen 2005:12; Tiwari et al. 2003:299). Theoretical knowledge that was taught in the classroom and through demonstration has to be linked in the clinical learning environment; thereby ensuring the relevance of the fundamental theory to the clinical environment (Bradshaw 2000:327; Koh 2002:40). Clinical learning therefore takes place in context (Stockhausen 2005:10). As students apply the various theories that are taught in the classroom, they are able to identify their own practice gaps (Crooks et al. 2005:364). Guided by Carper's taxonomy (view section 4.4.1) students should be encouraged to integrate as well as apply their knowledge to the practice (Knight et al. 2000:121).

Theoretical experiences complement the clinical experiences of students (Crooks et al. 2005:365). Koh (2002:40) view clinical placement as a way to enhance the integration of theory with practice. However, it still remains the student's responsibility as part of

her or his preparation to ensure that she or he is ready to apply the theory that was taught in the management of a patient (Le Clerc 2005:103). Melby (2000:643) asserts that even if students are faced with situations they have never encountered before, they must be able to apply existing knowledge and skills. Students view it as important to apply the knowledge that was taught in the classroom in the clinical setting (Papp et al. 2003:266).

4.4.2 PSYCHOMOTOR COMPETENCIES

Apart from cognitive competencies, the emergency nurse students need to obtain specific psychomotor competencies that are vital to be incorporated in the field of emergency nursing. Psychomotor competencies were identified during the Dream phase of the 5D-Cycle as an important component by the emergency nurse students. The various psychomotor competencies that were identified are discussed in sections 4.4.2.1 to 4.4.2.3. The following quotations from the emergency nurse students support the study findings.

- "...to maintain C-spine [cervical spine]..."
- "...asked me to assess the patients..."
- "...give the students a chance to do procedures..."

- ***Literature control***

Psychomotor competencies relate to the development of skills (Andrich 2002:41; Hinchliff 2004:65). There has been a focus shift from only acquiring psychomotor competencies to application of the psychomotor competencies (Arbon 2004:154). An essential part to develop psychomotor competencies is active involvement and encouraged participation (Maree & Fraser 2004:24). The authors opine that psychomotor competencies include the '*act of doing*'. Therefore, the emergency nurse student will have to physically perform the actions in the pre-hospital learning environment. In addition, psychomotor skills are important in the nursing practice (Chau et al. 2001:113) since it involves the art of muscular coordination and focuses on guidance of performance (Mashaba & Brink 1994:67). Clinical experiences allow for the development of various psychomotor skills (Sendir & Acaroglu 2008:737). According to Carl (2009:83), psychomotor competencies comprise three levels and these are outlined in Table 4.5.

Table 4.5: Psychomotor competencies

LEVEL	COMPETENCY	DESCRIPTION
Level 1	Cognitive	• Knowledge acquired
Level 2	Absorption of recording	
Level 3	Automation	• No effective or cognitive interventions needed • Actions happen automatically

Adapted from Carl (2009:83)

Level 1, being the cognitive level, is all about the knowledge that has been acquired regarding the actions that has to be performed (Cawood, Muller & Swartz, 1982:54). This entails that the student has to know when and how to perform the task as well as the structures involved in the completion of the task and the record keeping to be followed after task completion (Cawood et al. 1982:54). Absorption of recording is regarded as level 2 by Cawood et al. (1982:54) and is regarded as quite a long phase, since it starts off with the lack of ability to perform a task and end with the ability to complete the same task. Therefore, level 2 allows for the practicing of the correct behaviour patterns needed for the particular competency. The last, is level 3 – automation. During the level of automation Cawood et al. (1982:54) suggest that the student is at a level that task performance becomes second nature and therefore no cognition is needed at this level.

4.4.2.1 Skills

Various skills are the psychomotor competencies that were identified in both the Delivery and Dream phases of the 5D-Cycle. It must be noted here that quieter times do indeed occur in the pre-hospital learning environment during which the practicing of various skills are promoted, for example, when assessing a patient and/or the scene of the accident. Scene safety is an important concept for the pre-hospital personnel and it was clear from the study findings that the emergency nurse students regarded it as such. Also, the emergency nurse student participants demonstrated an understanding of the various mechanisms of injury that a patient may have. The mechanism of injury finding is supported by the following quotations pertaining to (i) the Delivery phase and (ii) the Dream phase of the 5D-Cycle.

(i) The following quotations from the emergency nurse students support the study findings with regard to the Delivery phase of the 5D-cycle.

- "...ensuring the environment is free of hazards..."
- "...questioned about ... and environment safety..."
- "I developed an appreciation for 'mechanism of injury'..."
- "...learnt the importance of mechanism of injury..."
- "...primary and secondary survey..."
- "...develop assessment skills..."
- "The triage of the pt [patient] on scene..."
- "...opportunity to practice many skills..."
- "...secure C-spine [cervical spine] ... had to be tubed..."
- "...protection of C-spine [cervical spine]..."

(ii) The following quotations from the emergency nurse students support the study findings with regard to the Dream phase of the 5D-cycle.

- "Greater exposure to advanced life support skills and the ability to practice these skills..."
- "...that they give the students a chance to do procedures..."
- "...opportunity to be more hands on..."
- "...know CPR [cardio-pulmonary resuscitation]..."
- "...correct and effective patient assessment and management..."

- ***Literature control***

According to Mellish et al. (2005:35), skills relate to the completing of certain actions which involves the use of muscle(s). It is imperative that nurses master the various clinical skills relating to professional practice in order to register in the specialty (Nicol & Freeth 1998:601). Clinical experience that is planned may facilitate students to develop their clinical skills better (Edwards et al. 2004:249; Jackson & Mannix 2001:275). Furthermore, clinical placement allows for the development in nursing skills (Chung-Heung & French 1997:456; Edwards et al. 2004:249). In a study conducted by Carlisle, Calman and Ibbotson (2009:716) it was found that it becomes the responsibility of the clinical staff to ensure that students acquire their clinical skills. Mentors had taken on a supportive role to warrant the students' learning experiences significantly and support the acquisition of clinical competencies (Carlisle et al. 2009:717). According to Bahn (2007:721), nurses take part in formal education in order to obtain specialised clinical competencies that may assist to improve patient care.

Clarke (1998:369) states in South Arica emergency care is taught in all aspects including basic and advanced skills. The learning of skills can be viewed as a fundamental aspect

of a clinically based profession (Koh 2002:40; Woolley & Jarvis 2007:74). It becomes the student nurses' responsibility to accept that they are themselves accountable for a large part of their education and skills development in the clinical setting (Lewin 2007:239). In a study done by Chesser-Smyth (2005:324) it was revealed that clinical skills were viewed by the participants as an integral part of providing holistic care. In the same study the participants were of the opinion that clinical skills have to be acquired early on in training to ensure that students are well prepared for their clinical placement. Shared learning helps with the development of skills that is needed for teamwork as well as increasing the students' knowledge with regard to specific skills (Parsell & Bligh 1998:526). As students become more skilled they are able to solve problems and become more confident (Crooks et al. 2005:363). Additionally, they are able to assess a variety of situations more accurately after they have gained the skills in the clinical learning environment.

Skills include all the various actions, techniques, documentation and evaluation that the nurse has to perform according in accordance with the nursing process (Jerlock et al. 2003:224). According to Gardner, Gardner and Proctor (2004:149), the clinical setting allows for challenging demands with regard to students' clinical skills that may encourage them to progress in their learning. Melby (2001:731) notes students have been impressed and even amazed at skills such as the physical care and diagnoses by ambulance personnel. Many students wanted to be more 'hands-on' during the management of a patient in order to apply the skills they have learnt (Melby 2000:642; 2001:731). As new skills start to develop, it can be incorporated with existing skills in order to improve the range of diverse skills (Andrews, Biles & Taylor 2009:148). Due to the increase in opportunities to practice skills, one's confidence increases (Stockhausen 2005:12). Skills that are mastered in the clinical learning environment include patient and injury assessment, the assessment of vital signs, manoeuvring of equipment, and communication skills in difficult situations (Boyle et al. 2008:[3]).

4.4.2.2 Practice guidelines

Knowing the Advanced Life Support protocols apparently assisted the emergency nurse students in the pre-hospital environment during their rotation. Continuous monitoring of a patient during transfer to a facility was considered very important. The following quotations from the emergency nurse students support the study findings.

- "Giving of medication..."
- "...the monitoring of patient on the way to hospital."
- "...the paramedic protocols helped ..."

- ***Literature control***

In South Africa the paramedics utilise practice guidelines according to their scope of practice in order to administer certain medication (MacFarlane et al. 2005:147; Suserud & Haljamäe 1999:20). These practice guidelines are set out by the Health Professional Council of South Africa (HPCSA) in its protocols. Copies of the various protocols are available from the HPCSA website at <http://www.hspcsa.co.za>. Basic ambulance assistant protocols provide for basic interventions that include provision inhalations for respiratory disease, insertion of intravenous lines, and defibrillation (MacFarlane et al. 2005:146; Ten Duis & Van der Werken 2003:723). The paramedics' protocols are more extensive and were designed according the Advanced Cardiovascular Life Support (ACLS), Advanced Trauma Life Support (ATLS) and Paediatric Life Support (PALS) guidelines (Callaham & Madson 1996:539; Dyas et al. 1999:84; MacFarlane et al. 2005:146). Since clinical placement can cause a variety of challenges to the student they may also lack familiarity with the procedures and protocols. Therefore, during personal communication with Heyns (2009) it was emphasised that it is an important prerequisite for students who wanted to enrol in the emergency nurse programme at the specific tertiary nursing education institution where the current study was conducted to obtain 75% or higher in the oral examination in the paramedics' protocols before they are allowed to rotate in the pre-hospital environment.

Pre-hospital personnel use an increasing amount of different potent medications to treat various conditions according to specific formulated protocols catering for their unique needs (Lo, Lai & Mak 2000:285; Suserud & Haljamäe 1997:147). Protocols also include the management of diseases such as asthma, chest pains, drug overdose and many more (Lo et al. 2000:284; Ten Duis & Van der Werken 2003:723). According to Smith and Conn (2009:24), medications are given and procedures are performed according to set protocols. The authors state protocols guide the paramedics to make a decision concerning the transfer of the patient to the appropriate facility. Smith and Conn (2009:25) further view protocols as a guide that uses physiology, anatomy as well as the mechanism of injury to guide the paramedics in their decision making. Through clinical placement students have the opportunity to master their procedures (Baglin & Rugg 2010:147) and it allows for the application and interpretation of protocols (Edwards et al.

2004:249). The clinical learning environment can make students more aware of the policies and procedures that are utilised in the specific clinical area (Williams & Taylor 2008:904). For the purpose of this study, the specific clinical area will refer to the pre-hospital learning environment.

4.4.2.3 Independence

The pre-hospital learning environment created a learning opportunity for the emergency nurse student to practice independently. After the rotational period in the pre-hospital environment and obtaining a post-basic qualification in emergency nursing, the emergency nurse student could function independently in the hospital environment. Therefore, the experiences in the pre-hospital learning environment assisted to create an independent practitioner. The following quotations from the emergency nurse students support the study findings.

- "It's nice to make your own decisions..."
- "...able to think for myself..."
- "...could manage this case on our own, without the presence of a medical doctor..."
- "...allowed me to perform procedures..."
- "...I decided I should intubate the patient..."

- ***Literature control***

Being ***independent*** is defined as *"not looking to others for one's opinions or for guidance in conduct ..."* (*Merriam-Webster's on-line dictionary* 2011). As students start to share their knowledge and experiences, they become more independent (Campbell et al. 1994:1128). Through clinical placement, nursing education can focus on the development a student nurse's independence (Papp et al. 2003:262).

Independence, competence and professional growth is provided by the design of a curriculum (Neary 2000:465). The emergency nurse has autonomy and accountability thereby enhancing professional development and collaboration with members of the health care profession (Byrne et al. 2000:85). According to Löfmark and Wikblad (2001:45), independence contributes towards providing the students with the opportunity to make their own decisions.

4.4.3 AFFECTIVE COMPETENCIES

The third competency identified from the study findings was affective competencies. The two main emotions that were identified in the research findings are discussed in section 4.4.3.1 and section 4.4.3.2. The following quotations from the emergency nurse students support the study findings.

- "...and it was satisfying to know that I helped the patient..."
- "...such a feeling of accomplishment and proud and of course – relief!"
- "...it was satisfying to try..."

- ***Literature control***

Affective means "relating to, arising from, or influencing feelings or emotions" (*Merriam-Webster's on-line* dictionary 2011). Affective competencies relate to the formation of attitude, the development of one's own beliefs and attitudes (Andrich 2002:41; Bloom et al. 1956:7; Bloom et al. 1964:7; Hinchliff 2004:65, 66; Maben, Latter & Macleod Clark 2006:468). Affection describes the students' self-esteem as well their self-efficacy (Maree & Fraser 2004:22); in fact, affection may include the students' values as well as how the student may recognise his or her own ability to learn. These authors posit that values may include one's self-discipline, acknowledging the importance of information, and one's own competencies. Therefore, affective competencies deal with the students' attitudes and values; attitudes mostly focus on feelings of likes and dislikes, whereas values focus on the way one exists and include honesty, social recognition, and self-respect (Mashaba & Brink 1994:66). Table 4.6 outlines the four levels of affective competencies.

Table 4.6: Levels of affective competencies

LEVEL	COMPETENCY	DESCRIPTION
Level 1	Receipt	• Consciousness • Preparedness to give attention • Controlled or selective attention
Level 2	Response	• Consent to give attention • Preparedness to respond • Satisfaction

LEVEL	COMPETENCY	DESCRIPTION
Level 3	Value determination	• Acceptance of a value • Preferences • Dedication
Level 4	Characterisation	• Stable value system • Characterisation (part of behaviour)

Adapted from Carl (2009:82)

During level 1 a student gains the competency of receipt which is recognised by the willingness to pay attention (Cawood et al. 1982:53). The students then become aware of the study material leading to their controlled attention. Level 2 is the response level whereby the student gives her or his consent towards observation of action. There is now intellectual participation from the student. In level 3 values are determined whereby the student accepts the value of his / her actions (Cawood et al. 1982:53). The student shows acceptance, preference and dedication towards task performance. Last is level 4 which is the competency of characterisation. During this level the student exhibits signs of a stable value system with its own characteristics (Cawood et al. 1986:54). The author suggests that the student has control over her or her own actions.

According to Mellish et al. (2005:35), affective competencies relate to the feelings of the student. The Maslow hierarchy of needs identifies a need for self-actualisation (Jooste 2003:57; Mellish et al. 2005:35). Therefore, the sense of accomplishment and satisfaction, as identified by the emergency nurse students, can be viewed as self-actualisation as it was identified by Maslow. In the clinical environment students learn various emotions, including the importance of caring, feeling valued, and self-worth (Maben et al. 2006:343). Students are often confronted with their own values and attitudes towards the patients that they treat (Melby 2001:737).

4.4.3.1 Positive emotions

It was clear from the research findings that the emergency nurse students experienced several positive emotions during their rotational period in the pre-hospital environment. The following quotations from the emergency nurse students support the study findings.

- "...the pre-hospital environment was an adrenalin rush..."
- "The whole experience was memorable..."
- "I enjoyed working in that stressful situation..."

- ***Literature control***

Tolerance, patience, confidence and respect are just a few of the emotions students communicated with regard to their various learning experiences (Mclean et al. 2006:99). Due to experience, nurses develop caring and connection qualities (Arbon 2004:155). Stockhausen (2005:10) notes feelings that the students acquire include empathy, while reports of satisfaction and that something good has been achieved have also led to patient satisfaction according to Machen et al. (2007:189) and Jackson (2005:116). Furthermore, feelings of being positive about the profession have been experienced, leading to the students looking forward to the next day. Evans and Kelly (2004:479) report positive emotions such as a sense of achievement and determination relating to nursing education was experienced by students. Oerman and Lukomski's (2001:70) view is that some students may find that experiences which provoke stressfulness and anxiety quite challenging and stimulating. During nursing training developing characteristics such as caring, compassion and support have been reported (Day et al. 1995:360).

4.4.3.2 Challenging emotions

Not all emotions can be positive and some emergency nurse students experienced more challenging emotions. One such an emotion included a feeling of discouragement. The following quotations from the emergency nurse students support the study findings.

- "...have a lot of frustrations..."
- "...experienced anxiety since I was out of my comfort zone..."
- "I was nervous and scared since the environment is different from ours..."
- "...there was nothing challenging during the period..."
- "...emotional distress situations..."
- "I did not enjoy the 'politics' amongst the pre-hospital personnel..."

- ***Literature control***

Some of the challenging emotions that have been identified in other studies include considerable amounts of stress in the particular setting, especially when comparing community-based settings to in-hospital settings (Baglin & Rugg 2010:146; Healy & Tyrrell 2011:37). Feelings of frustration were also encountered in a clinical learning environment by students (Stockhausen 2005:8). Clinical placement, as well as performing procedures in the clinical learning environment, has created emotions of stress, fear and anxiety (Boychuck Duchscher 2001:434; Jones & Johnston 1997:480;

Knight et al. 2000:121; Levitt-Jones & Lathlean 2008:108, Oerman & Lukomski 2001:70). Sources of stress as identified by Jones and Johnston (1997:480) include stress associated with the '*fear of failing*' and '*lack of time*'. Furthermore, Evans and Kelly (2004:478) report students experiencing emotions of exhaustion, frustration and worries. Working with the ambulance services may bring about feelings of worry relating to the work environment as well as to certain situations (Svensson & Fridlund 2008:42). Students tend to experience the clinical learning environment as stressful (Oerman & Lukomski 2001:70).

4.5 THEME 3: TEAMWORK

The study findings indicated that teamwork was regarded as an important aspect in the pre-hospital learning environment. Teamwork related to both the Dream and the Design phases of the 5D-Cycle. Table 4.7 presents a summary of the categories and sub-categories identified under teamwork. They are discussed in sections 4.5.1 and 4.5.2.

Table 4.7: Teamwork

THEME	CATEGORIES	SUB-CATEGORIES
Teamwork (*view* section 4.5)	Communication (*view* section *4.5.1)*	On scene (*view* section *4.5.1.1)*
		"Dispatch" (*view* section *4.5.1.2)*
Teamwork (*view* section 4.5)	Mutual respect (*view* section *4.5.2)*	

The following quotations from the emergency nurse students support the study findings.

- "Increased cooperation that existed between trauma unit and EMS [emergency medical service]..."
- "...casualty staff are [is] not friendly..."
- "Teamwork was excellent..."
- "Everyone on scene..."

- ***Literature control***

Teamwork is described as *"the ability of a group of people to work together effectively"* (*Longman dictionary of contemporary English 1987*). In the pre-hospital environment, teamwork is essential since a lack of this can lead to uncoordinated, fragmented and ineffective care (Melby 2001:733). Effective multidisciplinary teamwork is crucial to ensure safe patient care (Clark et al. 2010:268). Positive relationships in the clinical learning environment may facilitate the students to experience their learning as part of a team (Baglin & Rugg 2010:149). This may also increase their confidence. The ambulance personnel's attitude towards other members of the multidisciplinary team was judged by students when they worked with them (Melby 2000:641; 2001:731). Moreover, the students appreciated the fact that the ambulance personnel broadened their professional relationship to include them. Teamwork is considered the most successful means to meet the patients' needs (Parsell & Bligh 1998:527). Teamwork allows for coordinated continuity of care and is not uncommon in the health care profession (Hallikainen et al. 2007:372; Merriman 2008:57). Between the various role players, including the hospital personnel, teamwork should be improved without professional barriers standing in its way (O'Meara 2003:202).

Identification of clear roles and responsibilities in a resuscitation situation is essential; teamwork is crucial so that all of the accessible professional resources can be utilised (Andersen et al. 2010:697; Andrews, Biles & Taylor 2009:150). A team leader should be in charge with each member completing his or her own individual task and supporting the other team members (Andersen et al. 2010:700). Emergency response to a scene involves a multidisciplinary approach with a wider contribution from both the staff on scene as well as the receiving hospital (Flabouris 2003:851). Through interdisciplinary teamwork care is enhanced (Andrews et al. 2009:150; Melby 2001:728). In fact, Jackson (2005:117) proposes that teamwork in general as well as getting along with the team members can be viewed as enjoyable. Between nurses and paramedics, effective teamwork may facilitate projects and, as Machen et al. (2007:190) argue, teamwork between these two professional teams can improve the quality of care significantly.

Stohler (1998:118) concurs by pointing out that teamwork is an important component of high performance interaction. In South Africa the pre-hospital environment is served by public ambulance services as well as private ambulance services working in unison to render the best possible service (Goosen et al. 2003:706).

4.5.1 COMMUNICATION

In the pre-hospital environment communication is perceived as just as vital as in any other professional milieu. From the study findings, it was evident that communication was a dream of the emergency nurse students as identified in the Dream phase of the 5D-Cycle. The following quotations from the emergency nurse students support the study findings.

- "A better communication structure between the working in hospital and EMS [emergency medical services] to prevent disagreement..."
- "...we responded on a call that came from ..."
- "...we received a call..."
- "...contact between pre-hospital team and hospital ensured that EU [emergency unit] personnel were ready for the patient on arrival..."

- ***Literature control***

Communication is defined as *"the act or process of communicating"* (*Longman dictionary of contemporary English 1987*). Van der Westhuizen's (1995:205) stance is that communication is, in fact, a way of life and always follows a specific process. The author explains the purpose of communication is to convey a message to a receiver in order to facilitate guidance and ensure the effective coordination of tasks. In addition, communication informs people about tasks to be performed and thus it ensures effective delegation. Effective communication with the rest of the team may influence decisions (Campo et al. 2008:153; Gunnarson & Stomberg 2009:86). Communication skills can be enhanced by means of team training drills (Clark et al. 2010:269). By tradition, emergency services inform the receiving hospital of an approaching ambulance transporting a patient; therefore it is a possibility that verbal communication may have some limitations which may include quality of voice transmission and technical problems (Anantharaman & Han 2001:147).

4.5.1.1 On scene

Communication on scene is very important in order to ensure a safe outcome for the patient. The following quotations from the emergency nurse students support the study findings.

- "Teamwork was excellent..."
- "The CCA [critical care assistant] said: 'Sr [sister] are you going to tube?'..."
- "...asked me to assess the patient..."
- "...work together and get the job done..."

- ***Literature control***

Clear, supporting communication towards a pertinent task within the clinical situation remains the key factor to preserve the structure (Andersen et al. 2010:697). These authors' recommended method of communication is a 'closed-loop communication' system with verbal confirmation. Communication related problems at an emergency site can cause a delay in patient treatment (Flabouris 2003:851) and open communication channels between personnel are critically important (Saarikoski & Leino-Kilpi 2002:261). Indeed, Johnson and Calkins (1999:150) and Suserud (2001:63) are in agreement that internal and external communication can sometimes be problematic. Day et al. (1995:360) stress the importance of both communicating clearly with the patient as well as listening intently to what precisely the patient is saying.

4.5.1.2 "Dispatch"

Communication from a call centre in order for the paramedics to respond to the call is of the utmost importance. Obviously the paramedics will not know that they are needed if they do not receive a call. Likewise, understandable communication to the receiving hospital is essential in order for the hospital to adequately prepare for the patient they are about to receive. The following quotations from the emergency nurse students support the study findings.

- "Every time we had to respond to a call ..."
- "Each time the telephone rang..."
- "...we responded to a call..."
- "...we received a call..."
- "One morning a call came in..."
- "Responding to [the] accident scene, in [within] minutes of [a] call..."
- "Contact between pre-hospital team and hospital ensured that EU [emergency unit] personnel were ready for the pt [patient] on arrival..."
- "...correct communication between dispatch and team and from team to hospital ..."

- ***Literature control***

Dispatch is defined as "to send off or away with promptness or speed; *especially*: to send off on official business*" (Merriam-Webster's on-line dictionary 2011).* In order to make the emergency services aware of an emergency, the public has to contact a national emergency number. Most of these numbers are toll-free and, in South Africa, the number to be contacted is 10177. In addition, a regional call dispatch can also be contacted (Goosen et al. 2003:706; MacFarlane et al. 2005:146). At the dispatch centres, software computer programmes are utilised to assist with accurate medical telephonic triage as well as with the dispatch of the suitable emergency vehicle (Carney 1999:758; Clarke 1998:371; MacFarlane et al. 2005:146; Wong & Blandford 2002: [2]). Based on the information received by a radio operator, information is communicated to the relevant ambulance personnel who are either on the road or at the base (Castrèn et al. 2008:194; Wong & Blandford 2002: [2]). Effective dispatch may decrease the response time of the emergency services (Castrèn et al. 2008:196; Lockey 2001:7).

Woodhall, Vertacnik and McLaughlin (2008:316) assert that the SBAR tool can provide valuable information to the receiving hospital and, additionally, it can be done via telephone or radio. SBAR is a pneumonic to describe the following regarding the patient: (i) Situation, (ii) Background, (iii) Assessment, and (iv) Recommendations (Woodhall et al. 2008:315).

- ***S*****ituation:**

  The situation entails that the caller identifies him- or herself. The caller has to indicate who the patient will be and what the problem is.

- **Background:**

  The caller has to identify the possible diagnosis of the patient. Include any relevant medical history. Add a summary of the treatment that has been initiated.

- **Assessment:**

  Provide the relevant vital signs and how oxygen is being provided, for example, via a facemask or endotracheal tube. The caller can add any complaints of the patients as well as the pain scale. It is important to add any changes that have occurred since the initial assessment was made.

- **Recommendations:**

  It will be necessary to state what equipment and categories personnel should be ready on the arrival of the patient at the hospital.

4.5.2 MUTUAL RESPECT

There was some controversy in the study findings relating to this sub-category. It seemed as if that there were some internal situations among the different role players which may have caused some problems. The following quotations from the emergency nurse students support the study findings.

- "...from different companies, work together..."
- "I did not enjoy the 'politics' amongst [among] the pre-hospital personnel..."
- ...too many small, private ambulance companies working against each other..."
- "...create mutual respect for each other..."

Although working in different disciplines, the pre-hospital personnel and the hospital personnel have to respect each other. The different disciplines can learn from each other, but in order for this to be successful, it is critical that the different role players must respect each other. It appears, from the research findings, that this was not always the situation. The following quotations from the emergency nurse students support the study findings:

- "...better work relationship between nursing and EMS [emergency medical staff] staff..."
- "A better communication structure between the hospital and EMS [emergency medical staff] to prevent disagreements..."
- "...to build better relationships between us..."
- ...drive around with the patient in the ambulance until a hospital will accept the patient..."
- "...cas [casualty] staff are not friendly always complaining..."

- ***Literature control***

Mutual refer to something being "*common or shared by several"* (*Oxford pocket Fowler's modern English usage* 2008). ***Respect*** refers to showing "*careful consideration for"* (*Longman dictionary of contemporary English 1987*). In the context of this study, ***mutual respect*** *referred to the consideration towards that which was shared between the pre-hospital staff and the emergency nurses.*

In order for a successful professional working relationship to exist there has to be mutual respect between the various role players in the pre-hospital environment. There has to be mutual respect between the various role players in emergency medical services as well as between the emergency medical services and the emergency nurses. Kotze (1990:321) observes that the working relationship between the ambulance personnel and the health care professionals has become more important over time. The author perceives this to be favourable since a healthy working relationship between the ambulance personnel and the health care professionals can foster a sense of belonging that will be advantageous to the overall care of the patient. Bradley et al. (2006, p. 1083) propose that, as mutual respect among the various disciplines and departments starts to develop over time, it inevitably results in all the teams working together towards a mutual goal. As a matter of fact, positive mutual respect assists to uphold the various teams during challenges. Campbell (2006:358) is of the opinion that mutual respect between various role players is important to bridge gaps. Stohler (1998:116) advocates that mutual respect is needed in order to overcome rescue obstacles while the responsibility of mutual respect requires mature practitioners as well as the willingness to depend on other members of the team. Furthermore, mutual respect enhances teamwork (Stohler 1998:118).

4.6 THEME: FUTURE STRATEGIES

As indicated by the findings, the emergency nurse students who participated in this study made some future strategies regarding the emergency nursing programme. In Table 4.8 a summary of the strategies made is reflected. These are discussed in more detail in sections 4.6.1 to 4.6.4.

Table 4.8: Future strategies

THEME	CATEGORIES	SUB-CATEGORIES
Future strategies *(view section 4.6)*	Study guide *(view section 4.6.1)*	
	Study guide *(view section 4.6.1)*	
	Orientation *(view section 4.6.2)*	
Future strategies *(view section 4.6)*	Orientation *(view section 4.6.2)*	
	Enhanced opportunities *(view section 4.6.3)*	Skills *(view section 4.6.3.1)* Exposure *(view section 4.6.3.2)* Debriefing *(view section 4.6.3.3)*
	Enhanced opportunities *(view section 4.6.3)*	Skills *(view section 4.6.3.1)* Exposure *(view section 4.6.3.2)* Debriefing *(view section 4.6.3.3)*

The following quotations from the emergency nurse students support the study findings.

- "I will suggest that..."
- "...nurses should be able to..."
- "...want to implement..."
- "To provide an opportunity..."
- "...in future also..."

4.6.1 STUDY GUIDE [CLINICAL WORKBOOK]

From the research findings it became clear that the emergency nurse students required a study guide [clinical workbook] for the pre-hospital environment to guide them with regard to the expectations in the pre-hospital environment as a learning environment.

The emergency nurse students required clearer, more defined learning objectives concerning the pre-hospital environment as a learning environment. It was apparent from the research findings that the current objectives were too vague. The following quotations from the emergency nurse students support the study findings.

- "Pre-hospital manual, training people from triaging to managing of disaster situations..."
- "Definite objectives should be set for going onto the road..."

- ***Literature control***

A ***study guide*** can be defined as a resource that has been designed to facilitate learning in a wide variety of areas (<http://encyclopedia.thefreedictionary.com/study+guide>). ***Clinical*** has already been defined in section 4.3 p.76. ***Workbook*** can be defined as "*a school book with questions and exercises. The answers ... written in the book by the student"* (*Longman dictionary, 1987*). Therefore, for the purpose of this study, a ***clinical workbook*** will refer to a book that the student will write in after observation and treatment of a patient. ***Learning*** has been defined in Chapter 1 (section 1.8.2, p.12). ***Objectives*** are defined as *"something toward which effort is directed: an aim, goal, or end of action..." (Merriam-Webster's on-line dictionary 2011).* For the purpose of this study ***learning objectives*** pertained to *clearly defined goals with regard to knowledge and skills to be obtained*.

Evidence-based practice of nursing can only be implemented with the support of clinical objectives that is highlighted by scientific evidence (Jerlock & Severinsson 2003:220). Students need a guide and structure outlining clearly how they should utilise their clinical learning opportunities as well as the volume of the experience that is required (Martin, Stark & Jolly 2000:534). The importance of clear objectives is to communicate required skills, capabilities and readiness and includes critical thinking (Parell & Bligh 1998:527). Learning outcomes at the end of a programme has to be clear (Parell & Bligh 1998:524). Clear objectives, according to Bloom's taxonomy, by the various facilities will assist the student to acquire the correct clinical experience in the clinical learning environment (Bryant et al. 2003:739; Krathwohl 2002:213). In other words, clear objectives need to be set by both the nursing education institution as well as the ambulance service with regard to the pre-hospital learning environment. Clear objectives can be communicated through a partnership and effective communication between the tertiary institution and the clinical learning environment – in the context of this study the clinical environment referred to the pre-hospital environment (Evans & Kelly 2004:479). Andrews et al.

(2009:149) assert that core objectives have to outline the generic skills that have to be acquired during a course. It is considered extremely important that clear guidelines are provided to all parties involved in the training of students to ensure a learning environment that is conducive to learning (Hartigan-Rogers et al. 2007:9). The guidelines can be written in a dedicated pre-hospital study guide. Clear objectives will also assist the assessors to make valid and clear judgements with regard to the student's competency (Andrich 2002:56).

4.6.2 ORIENTATION

The study findings indicated that the emergency nurse students had a need for orientation with regard to the pre-hospital environment as a learning environment because they were not in their usual familiar surroundings. Apart from an orientation programme, the emergency nurse students expressed that they needed to feel welcome when rotating in the pre-hospital environment precisely because they were out of their comfort zone. The following quotations from the emergency nurse students support the study findings.

- "Orientation plan for all learners..."
- "...orientated from checking the ambulance, medication in the morning, possible cases, medical and trauma..."
- "...orientation programme for at least two days, on how the pre-hospital field function [functions] when out on a call..."
- "An orientation programme..."
- "...want to implement a welcoming session..."
- "...for trauma RN [registered nurse] to feel more welcome on the first day of work..."
- "...not to feel unsure, scared, not knowing other colleagues..."

- ***Literature control***

Orientation is defined *as "the act or process of orienting or of being oriented..." (Merriam-Webster's on-line dictionary 2011)*. Orientation programmes can be viewed as the successful way to improve confidence in patient care as well as enhancement of competencies (Park & Jones 2010:148). These authors propose that orientation programmes should be the basic first step in a health care setting since it facilitates the transition and retention of the registered nurse.

4.6.3 ENHANCED OPPORTUNITIES

From the research findings it was clear that the emergency nurse students would have wanted to learn more while rotating in the pre-hospital environment. The important factors relating to enhanced opportunities are discussed in sections 4.6.3.1 to 4.6.3.3. The following quotations from the emergency nurse students support the study findings.

- "I wanted to practice everything that I have been taught..."
- "...gaining maximum exposure to the pre-hospital setting..."

- ***Literature control***

Enhanced is defined as *"Heighten, increase and* especially*: to increase or improve in value, quality, desirability, or attractiveness" (Merriam-Webster's on-line dictionary 2011).* ***Opportunity*** is defined as *"a* good chance for advancement or progress*" (Merriam-Webster's on-line dictionary, 2011).* For the purpose of this study ***enhanced opportunities*** was defined as the *provision of advanced chances to progress pre-hospital knowledge and skill*.

There is an increased need for learning opportunities in the healthcare profession for both pre- and post-registration students (Parell & Bligh 1998:523). A clinical environment which is conducive to learning offers multiple opportunities for professional development (Saarikoski & Leino-Kilpi 2002:261). Limited time and resources may lead to inadequate practicing of skills (Campo et al. 2008:150). Grant and McKenna (2003:534) refer to the fact that students may not always be allowed the opportunity for hands-on care as an example of inadequate time and/or resources.

4.6.3.1 Skills

An important factor that the emergency nurse has to master is various skills, but the study findings reflected that the emergency nurse students voiced this was another need which was not met while rotating in the pre-hospital environment. Except for various important skills that an emergency nurse has to have in the hospital setting, it is essential for her or him to acquire new skills in the pre-hospital environment. Some of the unmet skills mentioned by the emergency nurse students in this study included assessment (primary and secondary survey, triage), and the maintenance of the airway with cervical-spine control. The following quotations from the emergency nurse students support the study findings.

- "... to improve working skills..."
- "…practical demonstrations and theoretical [doing workshops with students]..."
- "Equipping people with not just theoretical knowledge but also practical skills..."
- "To produce competent, knowledgeable and skilled registered nurses..."
- "...develop independent practice skills..."

- ***Literature control***

Skill is defined as *"Proficiency ... that is acquired or developed through training or experience"* (<http://www.thefreedictionary.com/skill>). Despite the fact that there are potentially a variety of skills available in the clinical learning environment (Smith & Conn 2009:24), Haigh (2007:100) note that students are more often than not allowed to practice more in a safe learning environment. However, the fact is it is imperative that students have occasions where they can practice their clinical skills, under supervision, prior to clinical exposure (Woolley & Jarvis 2007:74, 78). Being given more frequent opportunities to practice skills seem to be a universal need among many students (Hartigan-Rogers et al. 2007:6) even though it has been ascertained that the practicing of skills definitely improves student confidence (Löfmark & Wikblad 2001:45).

4.6.3.2 Exposure

The current curriculum at the specific tertiary nursing education institution where this study was conducted provide for an 8-week rotational period in the pre-hospital environment. The study findings showed that some emergency nurse students expressed the wish to rotate in the pre-hospital environment for a longer period to maximise exposure. The following quotations from the emergency nurse students support the study findings.

- "...longer time on the road..."
- "...work more shifts in the pre-hospital environment ... this will provide the maximum exposure..."
- "...longer exposure is needed since it is not busy every day..."

- ***Literature control***

Exposure has already been defined in section 4.3. According to Martin et al. (2000:533), in the case of clinical exposure, more is always better since more exposure

will produce better practitioners. Evans and Kelly (2004:479) support the recommendation of exposure by commenting that adequate clinical placement time may limit the gap between theory and practice. Longer clinical placement may allow the students to meet their clinical objectives (Oerman & Lukomski 2001:71). Over time the emergency nurse's knowledge may improve if the clinical exposure time is longer (Mason et al. 2005:430). A lack of time spent in the clinical practice has proven to be an obstruction towards learning (Löfmark & Wikblad 2001:49). This supports the recommendations from the emergency nurse students to rotate in the pre-hospital environment for a longer period.

4.6.3.3 Debriefing

The findings of this study made it clear that some emergency nurse students believed that debriefing could assist in teaching them more. The following quotations from the emergency nurse students support the study findings.

- "...debriefing the student before the start of training..."
- "...debriefing after the student finish with [had completed the] training. Discuss peak points, where there is place for improvement from their point of view..."
- "...to summarise the treatment after patient was [has been] transported..."

- ***Literature control***

Clark et al. (2010:275) define ***debriefing*** as *"a formal reflective period that allows participants to integrate the experience ... with knowledge".* The authors opine that the importance of debriefing must not be underestimated, but should in actual fact be emphasised. They state that, by utilising a facilitator, an atmosphere is created which allows participants to feel safe enough to share in constructive criticism and focusing on learning objectives. In the emergency services in South Africa there is a need to implement an incident debriefing and a stress management system (MacFarlane et al. 2005:147). Clear feedback during debriefing is essential to a student to make him or her aware of his or her own strengths and weaknesses (Jackson 2005:118; Kilminster & Jolly 2000:835; Levett-Jones & Lathlean 2008:104). After major incidents, debriefing sessions with professional support teams are important (Suserud 2001:60). Debriefing should take place immediately after an incident in a separate room with the purpose to gather information from the student regarding their perceptions (Rhodes & Curran 2005:259). In addition, debriefing provides an opportunity to provide reinforcement, clarification and guidance. Feedback is viewed as an integral part to improve efforts and

to reinforce the adherence to protocols (Bradley et al. 2006, p.1083). Löfmark and Wikblad (2001:46) point out that, by receiving feedback, a student's self-confidence as well as the confidence she or he has in her or his professional abilities are significantly improved.

4.7 SUMMARY

In this chapter the study findings were presented and supported by a detailed literature control. Chapter 5 provides recommendations towards programme refinement and an overview of the study after completion.

CHAPTER 5
RECOMMENDATIONS AND CONCLUSION

"Reach high, for stars lie hidden in your soul. Dream deep, for every dream precedes the goal."

- Ralph Vaull Starr –

5.1 INTRODUCTION

In Chapter 4 the research findings corroborated by an in-depth literature control were discussed. The chapter was based on the (e)valuation of emergency nurse students relating to the pre-hospital exposure as part of the emergency nursing programme presented at a specific tertiary nursing education institution in Gauteng, South Africa.

Chapter 5 presents the conclusions as regards the four objectives of the study. The strategies related to each objective are formulated and are based on the 'peak experiences' as perceived by the emergency nursing students during their placement in the pre-hospital environment. Furthermore, strategies to address the challenges identified by the emergency nurse students are recommended to deliver ***"what will be"*** in future. The limitations of the study, future research opportunities as well as a personal reflection by the researcher are also discussed in this chapter.

5.2 AIM AND OBJECTIVES

The overall aim of this study was to (e)valuate the value of the pre-hospital environment utilised as part of the clinical learning component of the emergency nursing programme by means of **Appreciative Inquiry. T**he four objectives to achieve this purpose are outlined in Table 5.1.

Table 5.1: Objectives according to the 5D-Cycle

OBJECTIVE	DESCRIPTION
Objective 1	Discover ***"what is"*** referred to the perceived experiences as viewed by the students who were enrolled for the emergency nurse programme.
Objective 2	Dream ***"what could be"*** which related to the ideal pre-hospital learning environment.
Objective 3	Design ***"what should be"*** recommended within the pre-hospital environment to enhance the clinical learning experiences of the students.
Objective 4	Deliver ***"what will be"*** the strategies which can be implemented by the nurse educators to enhance the pre-hospital learning environment.

The conclusions for each of the first three objectives are discussed in sections 5.3.1 to 5.3.3. In section 5.3.4 strategies are provided which can guide the specific tertiary nursing education institution in Gauteng, South Africa to refine the clinical component specifically pertaining to the rotation through the pre-hospital environment to enhance the emergency nurse students' learning experience.

5.3 Conclusions

The discussions following are based on the four objectives in section 5.2 and relate to the 5D-Cycle (view Chapter 3).

5.3.1 OBJECTIVE 1: DISCOVER "*WHAT IS*"

Discovering ***"what is"*** refers to the experiences perceived by the emergency nurse students in the study who were enrolled for the emergency nurse programme. These experiences related to their rotational period within the pre-hospital environment as part of the clinical component as presented by a specific tertiary nursing education institution in Gauteng, South Africa. The research findings presented two main themes, namely, ***clinical exposure*** and ***competencies***.

Maximum ***clinical exposure*** to all types of emergencies benefitted the emergency nurse students in that they learned more about the pre-hospital environment; in fact, being

part of this domain afforded them the opportunity to learn as much as they possibly could. They were introduced and brought into close contact with a variety of emergency situations, including working in different and varied locations as well as in diverse environmental conditions. Some of the emergency settings and situations included medical conditions, motor vehicle accidents, and train accidents; some emergencies occurred in rainy weather accompanied by poor lighting and visibility, others in conditions where extreme temperature changes were experienced. Having been exposed to different emergencies on the road as well as at the patient's house, emergency nurse students experienced their ***clinical exposure*** as memorable and valuable.

Furthermore, their ***clinical exposure*** was regarded as informative by the emergency nurse students as it added insightful knowledge to their existing knowledge. Since there was something new, challenging and interesting to be learnt each day with every emergency call received, these experiences added to the value of the emergency nurse students' clinical exposure to the pre-hospital environment. It broadened the emergency nurse students' horizons and perspectives with regard to patients eventually being admitted to the emergency unit. Working in disorganised and unusual geographical environments can be regarded as valuable learning opportunities, since this assists the emergency nurse students to work and cope under pressure.

The emergency nurse students also valued the learning experience from their ***clinical exposure*** with regard to the various role players in the pre-hospital environment from whom they learned much. The emergency nurse students learned how to perform different management techniques and protocols independently from the paramedics on scene. They learned more with regard to scene safety from the fire brigade – they became acquainted with extrication techniques in the presence of the fire brigade and this resulted in a better perception of understanding the circumstances and conditions surrounding an emergency scene as well as valuing the importance of patient safety. The worth of the police, as another role player, who assist in scene safety and traffic control was further realised and valued by the emergency nurse students. Obtaining more knowledge regarding the functions of the various role players on the emergency scene and the importance of their work, can consequently be applied in the in-hospital setting since there is a better understanding of where the patient has come from.

Emergency nurse students valued the three ***competency*** domains of education as important to their pre-hospital rotation. The students gained more cognitive

competencies, psychomotor competencies as well as affective competencies. The implications of the improved ***competencies*** included that the emergency nurse students developed more insight and understood the pre-hospital environment to be a learning as well as a clinical environment. They became more aware and perceptive of the vital emergency services that the paramedics render within the pre-hospital environment as well as the mechanism of injury that a patient is admitted with. The emergency nurse students added value to the theory-practice correlation whilst rotating in the pre-hospital environment, since they were able to apply the theory learned in the classroom to the clinical environment.

Being able to practice the skills taught in the skills laboratories improved the emergency nurse students' psychomotor competencies because the students were allowed to perform the various skills themselves. The emergency nurse students valued the practice guidelines (protocols) as outlined by the Health Profession Council of South Africa (HPCSA) as this assisted them to correctly apply various skills. Being able to perform the various skills within the pre-hospital environment gave the emergency nurse students confidence and independence, thereby contributing to them becoming independent nurse practitioners. The outcome was that the emergency nurse students were able to make independent decisions with regard to the management of a patient on the one hand or, on the other hand, to make the decision to discuss the specific patient's management with a doctor.

The emergency nurse students experienced various emotions while working in the pre-hospital environment. These emotions included satisfaction when being able to assist and help a patient as well as experiencing feelings of accomplishment, pride and relief when they did something right. The 'adrenalin rush' the emergency nurse students experienced when travelling at high speed to emergency scenes, was also perceived as positive and immensely satisfying because they knew they were going where their help was needed. Some of the emergency nurse students admitted to experiencing a feeling of frustration during their rotational period in the pre-hospital environment during the more quiet periods when there were fewer challenges. Arguments between various ambulance companies added to their feelings of frustration. It is also important to note that, being a familiar environment, the emergency unit provided the emergency nurse students with a sense of security. Therefore, it was not unusual for some to experience feelings of anxiety, nervousness and fear when they were confronted with unfamiliar surroundings such as working on a railway track.

5.3.2 OBJECTIVE 2: DREAM *"WHAT COULD BE"*

Dream ***"what could be"*** relates to the ideal pre-hospital learning environment. These experiences relate to that which the emergency nurse students perceived to be the ideal pre-hospital learning environment. The research findings presented three main themes which emerged from the side of the emergency nurse students: ***competencies***, ***team-work*** and ***future strategies***.

The emergency nurse students valued the ***competencies*** that they learned in the pre-hospital environment (view section 5.3.1). A challenge was that there were quieter periods in the pre-hospital environment which resulted in them not being able to practice all the skills required. The emergency nursing students acknowledged that this particular challenge would be difficult to address since the pre-hospital environment is an unpredictable environment.

During their rotation through the pre-hospital environment, ***teamwork*** was perceived as an important skill by the emergency nurse students and they emphasised the value thereof. It was noted that communication and cooperation between the various role players (view section 5.3.1), namely the paramedics, the fire department, the police, the dispatch team as well as the in-hospital staff should be enhanced, specifically on-scene and when transporting the patient from the emergency scene to the hospital. The emergency nurse students indicated that they observed invidious, unpleasant attitudes and behaviours among the different role players. Disagreements, enviousness and decidedly uncalled for pettiness among some role players during emergency situations where people's lives were perhaps at stake, made the emergency nurse students realise that unified team work is crucial to ensure optimal patient outcomes. The emergency nurse students emphasised the importance of addressing ***teamwork*** as part of the curriculum of all stakeholders, including that of the dispatch team.

Future strategies were suggested by the emergency nurse students with regard to the pre-hospital environment as a learning environment. The emergency nurse students were of the opinion that the sections of the *study guide* [clinical workbook] which focuses on the pre-hospital environment should be separated from the *general study guide* [clinical workbook] provided for emergency nurse students. Additionally, the revised pre-hospital study guide [clinical workbook] should provide more specific guidance with regard to the learning objectives of the pre-hospital environment. The

emergency nurse students furthermore suggested the implementation of an orientation programme prior to placement in the pre-hospital environment. In their opinion, such an orientation programme can provide emergency nurse students with a better understanding of what is expected from them while rotating through the pre-hospital environment.

5.3.3 OBJECTIVE 3: DESIGN *"WHAT SHOULD BE"*

Design ***"what should be"*** pertains to recommended strategies in the pre-hospital environment to enhance the clinical learning experiences of emergency nurse students. These suggested strategies were based on the emergency nurse students' perceptions. The study findings of Objective 3 presented two main themes, namely ***teamwork*** and ***future strategies***.

The emergency nurse students valued mutual respect as an essential component to successful ***teamwork***. A regular phenomenon occurring in the pre-hospital environment is that different ambulance companies (from both the private and public sectors) provide similar emergency services. This means that they are, in fact, each other's adversary. It thus stands to reason that their arrival on the same emergency scene can lead to arguments about the transportation of ill or injured patients as the transportation of patients influence the remuneration of the ambulance companies. Furthermore, the levels of training and skills of the emergency staff arriving at the scene often differ and/or vary. This can lead to conflict among the different teams as well as among the team members themselves; the assumption can thus be made that the teams and/or team members do not respect each other in terms of their knowledge and skills. Communication is therefore regarded as an essential skill among the different ambulance companies and ambulance staff and should be addressed urgently. In addition, there should also be mutual respect and cooperation between the pre-hospital personnel and the in-hospital personnel in order to reach the same end goal, namely, optimal patient outcomes.

A complete, accurate study guide and clinical workbook in which the objectives which have to be reached by the emergency nursing students while rotating within the pre-hospital environment are clearly outlined, should be provided by the tertiary nursing education institution. The study guide and clinical workbook can be utilised to guide the paramedics when facilitating learning for the emergency nurse students in the pre-

hospital environment. The emergency nurse students again emphasised the importance of the facilitation of an orientation programme to assist them with the correct techniques and routines while rotating in the pre-hospital environment. They indicated that they required enhanced opportunities to practice their skills; this was especially needed when bearing in mind that quiet times often occur in the pre-hospital environment. In addition, the emergency nurse students suggested that the timeframe during which they rotate through the pre-hospital environment should be prolonged – a longer timeframe for rotation would inevitably allow more opportunity for enhanced learning.

5.3.4 OBJECTIVE 4: DELIVER "*WHAT WILL BE*"

Deliver ***"what will be"*** implies the recommended strategies that can be implemented by the nurse educators responsible for the emergency nursing programme presented at the tertiary nursing education institution as well as the paramedics who act as clinical facilitators in the pre-hospital environment to enhance learning in this clinical learning environment. The recommended strategies were based on the findings obtained from Objectives 1 to 3.

The strategies which were in place and valued by the emergency nurse students as those that should be continued with are listed below.

- Clinical exposure to the pre-hospital environment should be maintained as this adds value to the emergency nursing programme.
- Competency-based learning focusing on all three competencies (cognitive, psychomotor and affective) was valuable and should be continued with.
- Frequent meetings with clinical facilitators, including the paramedics from the pre-hospital environment, to communicate objectives as well as concerns regarding learning opportunities in the pre-hospital environment were positive and should remain.

In order to refine the emergency nursing programme, the recommended strategies mentioned next – and based on the suggestion by the emergency nurse students – need to be implemented.

- Psychomotor competencies within the pre-hospital environment could be improved by allowing emergency nurse students to perform more skills under direct supervision of clinical facilitators, including the paramedics and/or nurse educator.

- Revision in collaboration with the paramedics of the study guide and clinical workbook should be encouraged to ensure the relevance of the objectives and narrowing the theory-practice gap.
- The compilation of a separate clinical workbook for the pre-hospital learning environment with clear objectives to be reached in the pre-hospital environment.
- Planning and implementing an orientation programme in collaboration with the selected ambulance service providers where emergency nurse students are placed for the pre-hospital exposure.
- ***Teamwork***, including communication and mutual respect, should be encouraged and activated by, for example, implementing ***teamwork*** sessions and including ***teamwork*** as a component of the curriculum for all stakeholders involved in emergency care.
- Specific psychomotor competencies required by emergency nurse students can be improved by allowing more clinical practice time in the pre-hospital environment, and/or by allocating additional time in a simulated skills laboratory to practice skills.

5.4 LIMITATIONS

Despite the fact that the study mainly fulfilled its aim in that it had (e)valuated the pre-hospital environment as a clinical learning environment, some limitations should be noted.

The study was limited to only one tertiary nursing education institution and many of the students who successfully completed the emergency nurse programme in the period from 2008 to 2011 did not reside in the city where the tertiary institution was located. This made it difficult for the researcher to obtain perspectives from many participants and she had to make use of additional data collection strategies which is not optimal when utilising Appreciative Inquiry. Despite the fact that the Appreciative Interview schedule used utilised the principles guided by Appreciative Inquiry, no dialogue between the participants were possible. Finally, the study was limited to only one specific tertiary nursing institution in Gauteng, South Africa; this could lead to the representation of the findings being limited to only a particular geographical area.

5.5 FUTURE RESEARCH

Based on the findings of the study, the research topics stipulated below could be addressed in future research studies.

- Re-evaluate the pre-hospital environment utilised as a clinical learning environment once the recommended strategies have been implemented in order to refine the emergency nursing programme further.
- Explore the perception of the paramedics related to the value of emergency nurse students rotating through the pre-hospital environment.
- Construct and evaluate ***teamwork*** learning events among all the stakeholders involved in emergency care.
- Develop, implement and evaluate an orientation programme for emergency nurse students prior to rotation through the pre-hospital environment.

5.6 PERSONAL REFLECTION

Commencing with this study, I found the research process unfamiliar and overwhelming. Initially I was 'scared' to start with the process, but with the appropriate guidance and support from experts I was able to master the research process. This, in turn, led to personal and professional growth.

For me this research project became a personal journey of self-discovery. I learned the value of commitment and perseverance; of planning time and managing it more effectively, and I gradually became more adept at balancing my personal and professional commitments. I realised that one cannot start with any project, whatever it may be, without being totally committed to it. I discovered that the long hours and little sleep, frustration and desperation I experienced could only be counterbalanced by staying focused, opening up myself to be more receptive in order to grow and develop as a person, and to remain rigorous in my commitment to complete the project successfully. Although there were times I thought it would be better to give up and admit defeat, I learned to persevere as I envisioned the end goal – which I realised was not only to obtain a master's degree, but also to welcome and embrace my own personal growth and development that took place throughout my journey.

On a professional level, I started to read scientific articles related to my work critically, searching for and endeavouring to implement evidence-informed practice. Reading about Appreciative Inquiry enabled me to utilise the principles when facilitating learning of emergency nurse students and, when giving feedback, to focus on the positive aspects first. In my professional career as a clinical facilitator, doing the research for this study provided me with valuable and insightful information that I found could assist me in my professional, daily activities: I realised I could utilise the data obtained from the data

analysis to significantly improve the way I do clinical facilitation with students enrolled for the emergency nurse programme. By becoming a student and a learner myself brought me directly into contact with the difficulties and problems many emergency student nurses face; I learned to understand once again their hopes and despairs and the larger contexts in which these are embedded. But having travelled this road myself again, enabled me to motivate my emergency nurse students to do their best, to persevere and to show commitment, especially when new learning opportunities presented themselves.

Although research is time-consuming and requires perseverance, dedication and hard work, it became an interesting and fulfilling period in my life. I learned to utilise many different resources as well as referencing techniques, which triggered my interest in the field of emergency nursing and ignited in me a passion for the research process in general. As I gained more and new knowledge with regard to research methodologies, especially where Appreciative Inquiry was concerned, I discovered many opportunities for learning in the field of research. By reading a myriad articles and books in order to write the dissertation, I became aware of interesting topics and issues which had not yet been investigated or needed further investigation. In fact, I believe that undertaking this research project has undoubtedly set me on a pathway for my future career development.

I wrongly assumed that research was a lonely endeavour. Apart from the valuable support and assistance I received from my supervisors, I was astounded by the support and backing I encountered in my own work environment. Colleagues and senior health care professionals encouraged me and constantly enquired about my progress. Their interest in my study inspired and motivated me and strengthened my feeling of self-achievement. Moreover, it filled me with pride when my involvement in this study initiated discussions at my workplace during which I could share my new knowledge with my colleagues. In fact, many of them became so intrigued by what I did and said, that they contemplated furthering their own careers by conducting research studies themselves. This made me confident since it made me feel I was being a motivator and supporter to my colleagues as well.

The completion of this research project has instilled in me a tremendous and overwhelming sense of personal and professional pride and achievement. I realised how important it was for all role players in the pre-hospital environment to work together to enhance the emergency nurse students' learning experience. It is only by working

together as a team that patients will receive the best possible care; that they will really feel cared for. Moreover, this experience has made me aware that, as health care professionals – especially in the pre-hospital emergency environment – we often have to go beyond the call of duty to deliver exemplary care and service.

5.7 CONCLUSION

"The future is literally in our hands to mould as we like. But we cannot wait until tomorrow. Tomorrow is now."

- Eleanor Roosevelt -

This study was presented in five chapters. In Chapters 1 the reader was provided with an orientation to the study. It focused on the problem identified and provided background to support the problem statement. The focus of this study was to (e)valuate the pre-hospital environment by students enrolled for an emergency nurse programme in a specific tertiary nursing education institution in Gauteng, South Africa.

In Chapter 2 an in-depth discussion of Appreciative Inquiry was provided to orientate the reader to understand the extent and overall use of Appreciative Inquiry in research. The topics addressed included a historical overview of Appreciative Inquiry, the core principles, the 5D-Cycle, Appreciative Inquiry versus traditional approach and the application of Appreciative Inquiry to nursing. The benefits, possibilities and critique related to Appreciative Inquiry were also mentioned.

Chapter 3 provided an overview of the research design and methodology utilised in this study to address the research purpose and objectives. In this study a qualitative, descriptive design was utilised, using Appreciative Inquiry as the research methodology to guide the research process. The population, sample and specific strategies to enhance trustworthiness were explained and summarised.

In Chapter 4 the research findings were provided using the 5D-cycle of Appreciative Inquiry to guide the discussion. Each of the themes, categories and sub-categories was supported by relevant literature. The four main themes identified were: (i) clinical exposure, (ii) competencies, (iii) teamwork, and (iv) future strategies.

Chapter 5 provided an overview of the conclusions derived from the first three objectives of the set objectives delineated for the study and focused on "what is", what "could be"

and what "should be". Based on the conclusion, recommended strategies were formulated to guide what "will be" the future of the pre-hospital clinical component of the emergency nursing programme. The limitations and suggested future research opportunities were noted. A personal reflection by the researcher concluded this chapter.

ANNEXURE B

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences Research Ethics Committee

31/03/2010

Number	:	**S35/2010**
Title	:	Clinical learning experiences of emergency nurse students in the pre-hospital environment
Investigator	:	Sonett van Wyk, Department of Nursing Science, University of Pretoria (SUPERVISORS: Mrs IM Coetzee / Dr T Heyns)
Sponsor	:	**None**
Study Degree:		**M. Cur (Clinical)**

This Student Protocol was approved by the Faculty of Health Sciences Research Ethics Committee, University of Pretoria on 30/03/2010. The approval is valid for a period of 3 years.

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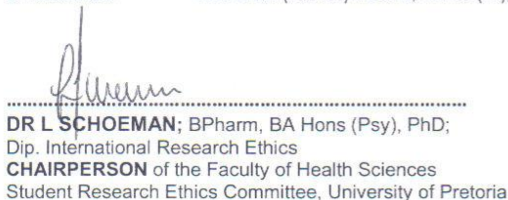

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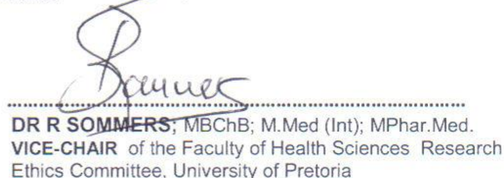

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ANNEXURE C

UNIVERSITEIT VAN PRETORIA
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Faculty of Health Sciences Research Ethics Committee

7/12/2011

Amendment :	**Change in: Title**
Number :	**S35/2010**
Title :	(E)valuating the pre-hospital learning environment by students enrolled for an emergency nursing programme
Investigator :	Sonett van Wyk, Department of Nursing Science, University of Pretoria (Supervisor Dr T Heyns and Co-Supervisor Dr IM Coetzee)
Sponsor :	**None**
Study Degree:	**M. Cur (Clinical)**

This Amendment "Change in: Title" was reviewed by the Faculty of Health Sciences Research Ethics Committee, University of Pretoria on 7/12/2011 and found to be acceptable.

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ANNEXURE D

ANNEXURE D

Participation leaflet and informed consent

Dear colleague,

You are invited to participate in a research study entitled "Clinical learning experiences of the emergency nurse students in the pre-hospital environment". This information leaflet contains information that will help you understand your role in the study. If there is any need for further clarification, please feel free to contact the researcher at any time.

TITLE OF STUDY

Clinical learning experiences of students in the pre-hospital environment

1) The purpose and objectives of the study

You are requested to take part in a research study. Your participation will be as a qualified emergency nurse that has already worked within the pre-hospital environment.

Students are required to work in the pre-hospital environment as part of the clinical placement during the emergency nursing programme, to gain the necessary experience, knowledge and skills, in order to prepare them for their future duties and responsibilities in the emergency units.

In order to maximise the student's clinical learning experience, there is a need to examine their past experiences in the pre-hospital learning environment

The overall aim of this study is to evaluate the pre-hospital environment as part of the clinical component of the emergency nursing programme, by means of Appreciative Inquiry (AI).

In order to achieve this aim, the following objectives pertaining to the pre-hospital environment, will be investigated:

- **Objective 1:** Discovering ***"what is"*** refers to the experiences perceived by the students who are enrolled for the emergency nurse programme;
- **Objective 2:** Explore ***"what could be"***, which is the ideal pre-hospital learning environment;
- **Objective 3:** Describe ***"what should be"*** recommended within the pre-hospital environment to enhance the clinical learning experiences of students;
- **Objective 4:** Construct recommendations towards programme refinement

2) Explanation of procedures to be followed

You as an emergency nurse are requested to participate in a collaborative effort to plan actions that would enhance future emergency nurse students' experiences in the pre-hospital learning environment. You are requested to complete an appreciative interview schedule, consisting of four open-ended questions. Appreciative Inquiry is seen as a practice in search of that what is best and seeking what is right, so that a desired future can be created. By completing the attached Appreciative Inquiry interview schedule, you will be sharing your own voice, dreams, hopes, wishes, visions and ideals for future emergency programmes.

3) Risk and discomfort involved

As a participating emergency nurse, you will experience no discomfort. There is also no risk involved in this study. However, your input into this project will require some time and effort.

4) Significance of the study

This study will explore what the clinical learning experiences may be of the student during clinical placement in the pre-hospital learning environment. Based on the findings of the study, recommendations will be made with regard to programme refinement

5) Voluntary participation in and withdrawal from the study

Participation occurs on a voluntary basis, and you can withdraw at any time from the project without stating any reason, should you no longer wish to take part.

6) Ethical approval

The Faculty of Health Sciences' Research Ethics Committee at the University of Pretoria has granted written approval for this study.

7) Additional information

If you have any questions about your participation in this action research project, you should contact the researcher, Ms Sonett van Wyk –

Work telephone:	(012) 421 9100
Cell phone:	082 491 5897
Email address:	sonettvw@vodamail.co.za

8) Confidentiality

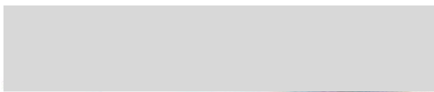
Your input into this research will be kept confidential. Results will be published and presented in such a manner that you as a participant will remain anonymous.

9) Consent to participate in this study

Your participation in this research is subjected to reading and accepting the above information and signing the informed consent document below. A copy of your signed consent document will be given to you.

INFORMED CONSENT

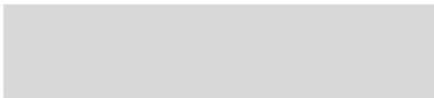
I have read the above information leaflet and fully understand what is expected of me. Its content and meaning have been explained to me. I have been given the opportunity to ask questions and received satisfactory answers. I hereby volunteer to take part in this research.



Participant's signature

07-09-10

Date



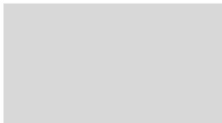
Person obtaining informed consent (Researcher)

7.9.10

Date

Witness

Date



Researcher

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Appreciative Interview schedule for Emergency nurse students

1. Reflecting back on the six weeks clinical placement in the pre-hospital environment, what was your most satisfying/peak experience?
(Please write me the story)

I found working in the pre-hospital environment beneficial & informative. The time period in which I worked in the prehospital environment was fairly quiet & I therefore did not get the opportunity to practice many skills. However, I was exposed to scenes on the road as well as scenes in the home. I benefited by ~~seeing~~ witnessing prehospital treatment & its difficulties & limitations. This has given me a better understanding of how to manage the patient when he/she comes into the trauma unit as I am more aware of the environment from which they have come. I also learnt the importance of mechanism of injury, medication administered prehospital as well as the primary assessment. I did not enjoy the 'Politics' amongst the prehospital personnel, however it was easy for me to stay uninvolved. My most satisfying experience was ~~to~~ a resuscitation I participated in at a MVA. Even though it was unsuccessful, it was satisfying to try.

2. Imagine it is five years from now and it is now your duty to help improve the pre-hospital learning environment. What would you want to implement?

In my opinion there are too many small private ambulance companies working against each other in the pretoria. I think if ~~the~~ all the ambulance personnel had to work together for one unified company, a larger area could be covered more effectively & I think rescources would be better utilised.

3. What is your vision for the six weeks clinical placement in the pre-hospital environment?

To provide an opportunity for trauma nurses to be exposed to the prehospital environment for the purpose of gaining understanding regarding the manner in which the event as well as prehospital management affects nursing care in the trauma unit.

ANNEXURE E

Participation leaflet and informed consent

Dear colleague,

You are invited to participate in a research study entitled "Clinical learning experiences of the emergency nurse students in the pre-hospital environment". This information leaflet contains information that will help you understand your role in the study. If there is any need for further clarification, please feel free to contact the researcher at any time.

TITLE OF STUDY

Clinical learning experiences of students in the pre-hospital environment

1) The purpose and objectives of the study

You are requested to take part in a research study. Your participation will be as a qualified emergency nurse that has already worked within the pre-hospital environment.

Students are required to work in the pre-hospital environment as part of the clinical placement during the emergency nursing programme, to gain the necessary experience, knowledge and skills, in order to prepare them for their future duties and responsibilities in the emergency units.

In order to maximise the student's clinical learning experience, there is a need to examine their past experiences in the pre-hospital learning environment

The overall aim of this study is to evaluate the pre-hospital environment as part of the clinical component of the emergency nursing programme, by means of Appreciative Inquiry (AI).

In order to achieve this aim, the following objectives pertaining to the pre-hospital environment, will be investigated:

- **Objective 1:** Discovering ***"what is"*** refers to the experiences perceived by the students who are enrolled for the emergency nurse programme;
- **Objective 2:** Explore ***"what could be"***, which is the ideal pre-hospital learning environment;
- **Objective 3:** Describe ***"what should be"*** recommended within the pre-hospital environment to enhance the clinical learning experiences of students;
- **Objective 4:** Construct recommendations towards programme refinement

2) Explanation of procedures to be followed

You as an emergency nurse are requested to participate in a collaborative effort to plan actions that would enhance future emergency nurse students' experiences in the pre-hospital learning environment. You are requested to complete an appreciative interview schedule, consisting of four open-ended questions. Appreciative Inquiry is seen as a practice in search of that what is best and seeking what is right, so that a desired future can be created. By completing the attached Appreciative Inquiry interview schedule, you will be sharing your own voice, dreams, hopes, wishes, visions and ideals for future emergency programmes.

3) Risk and discomfort involved

As a participating emergency nurse, you will experience no discomfort. There is also no risk involved in this study. However, your input into this project will require some time and effort.

4) Significance of the study

This study will explore what the clinical learning experiences may be of the student during clinical placement in the pre-hospital learning environment. Based on the findings of the study, recommendations will be made with regard to programme refinement

5) Voluntary participation in and withdrawal from the study

Participation occurs on a voluntary basis, and you can withdraw at any time from the project without stating any reason, should you no longer wish to take part.

6) Ethical approval

The Faculty of Health Sciences' Research Ethics Committee at the University of Pretoria has granted written approval for this study.

7) Additional information

If you have any questions about your participation in this action research project, you should contact the researcher, Ms Sonett van Wyk –

Work telephone: (012) 421 9100
Cell phone: 082 491 5897
Email address: sonettvw@vodamail.co.za

8) Confidentiality

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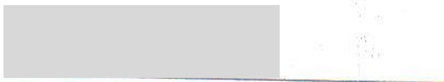


Participant's signature

21.06.2011

Date

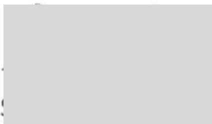
Person obtaining informed consent (Researcher)

21.06.2011

Date

Witness

Date



Researcher

Appreciative Interview schedule for Emergency nurse students

1. Reflecting back on the six weeks clinical placement in the pre-hospital environment, what was your most satisfying/peak experience?
(Please write me the story)

→ Scene MVA – pt drive no seatbelt
- Read in book
- See in "practice"

} Theory-Practice correlation

ALS → teaching (Skilled)

1.1 What feelings did you experience during the pre-hospital rotation?

- Scared !!! → Have Skills / Knowledge !!
- Everybody watching - Anxiety (Emotion)

1.2 Tell me more about what you valued most about:

- Yourself

(Knowledg)
Assesing the patient — Knowledge

- The nature of the work

Knowdege → extracate (Skills) — Skills

1.3 What gives life to this programme?

- Adrenaline rush — Emotion

1.4 What did you find exciting?

"Adrenaline Rush" Emotion

Dispatch • Receiving a call
Driving to scene

1.4 Tell me more about a milestone that you reached during the pre-hospital rotation.

• Teach primary school CPR!!

1.5 Elaborate more about the different experiences you had.

• Extracate

1.6 What did you find exciting about the various emergencies / injuries?

→ correlate theory / practice — Theory - practice
→ Look spec injuries
→

1.7 How did the EMS / Fire brigade provide support to each other / you?

→ Very supported — Teamwork
→ Felt welcome — → Mutual respect
→ Teaching

1.8 What did you find most interesting when observing the EMS at work?

- Teamwork very NB!!
- "Answerable...

Teamwork

1.9 Tell me more about the skills that you learned.

- skills ET → diff position Variety
- work in team.
- environment – moving ambu Location

2. Imagine it is your duty to help improve the pre-hospital learning environment. What would you want to implement?

→ Place private ambulance service } Interhospital transfer

Not challenge!!

- Trauma call out Dispatch

(Work longer)

2.1 Share your wishes for the program with regard to the pre-hospital learning environment.

2.2 How can the relationship between the different parties are improved.

Communication

→ Communication problem
meeting / Training update

2.3 What would have better prepared you for the pre-hospital learning environment?

- ALS protocol — Protocol / Practice guideline
- Medication — test.

2.4 How can the exposure to the pre-hospital learning environment be improved?

2.5 How do you propose that the quality of training in the pre-hospital learning environment can be improved?

- ↑ Time available to learn.

More Exposure

3. What are your end goal / vision for the six weeks clinical placement in the pre-hospital environment?

- Able to asses + manage effectively (!)
-

3.1 How do you propose the understanding between the different role players can be increased in the future?

3.2 Comment on the improved relationship between the EMN & the emergency nurse.

3.3 What is your vision with regard to having competent, knowledgeable, skilled emergency nurses?

3.4 How can the emergency nurse's confidence be increased through the pre-hospital rotation?

3.5 Why, in your opinion, will an emergency nurse be able to practice independently?

Competencies:
- Knowlegde
- Skill
- Practice – Rotating

ANNEXURE F

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RESEARCH DATA ANALYSIS REPORT

FOR: Sonett van Wyk

DATE: 2011 12 05

STUDY: Clinical learning experiences of students in the pre-hospital environment.

INDEPENDENT CODER: Annatjie van der Wath

Method: Data analysis was done following the steps described by Tesch (1990: 142-145) in Creswell (2009: 125).

Steps:

Saturation of data was achieved related to the major themes. The researcher was advised to conduct member checking for certain categories that lacked saturation (in cases where four to six verbatim quotes are not available to substantiate themes).

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YUNIBESITHI YA PRETORIA

Annatjie van der Wath (M Cur Psychiatric Nursing) annavdw@mweb.co.za

Qualitative Data Analysis

M Cur Nursing Science

Sonett van Wyk

This serves to confirm that Annatjie van der Wath has co-coded the following qualitative data: Appreciative inquiry schedules for the study:

Clinical learning experiences of students in the pre-hospital environment

I declare that the candidate and I have reached consensus on the major themes and categories as reflected in the findings during a consensus discussion.

Annatjie van der Wath (M Cur Psychiatric Nursing) annavdw@mweb.co.za

ANNEXURE G

2 JANUARY 2012

TO WHOM IT MAY CONCERN

I, Suzette Marié Swart (ID 5211190101087), confirm that I have edited the following thesis:

Name of student:

SONETT VAN WYK

Title:

(E)VALUATING THE PRE-HOSPITAL LEARNING ENVIRONMENT BY STUDENTS ENROLLED FOR AN EMERGENCY NURSING PROGRAMME

Thank you

Suzette M Swart* *(not signed – sent electronically)*

0825533302

smswart@vodamail.co.za

LANGUAGE PRACTITIONER/EDITOR:

The Consortium for Language and Dimensional Dynamics (CLDD)

University of Pretoria (UP)

Tshwane University of Technology (TUT)

University of Johannesburg (UJ)

University of South Africa (UNISA)

Milpark Business School

SA National Defence Force (SANDF)

Civil Aviation Authority (CAA

*Full Member of ***The Professional Editors' Group***

The edit included the following:

- Spelling
- UK vs USA English
- Vocabulary
- Punctuation
- Grammar (tenses; pronoun matches; word choice etc.)
- Language tips
- Correct acronyms (please supply list)
- Consistency in terminology, italisation etc.
- Sentence construction
- Suggestions for text with unclear meaning
- Basic references (consistency in text and against bibliography)
- Basic layout, font, numbering etc.
- Logic, relevance, clarity, consistency

The edit excluded:

- Correctness of crediting another's work – PLAGIARISM.
- Content
- Correctness or truth of information (unless obvious)
- Correctness/spelling of specific technical terms and words (unless obvious)
- Correctness/spelling of unfamiliar names and proper nouns (unless obvious)
- Correctness of specific formulae or symbols, or illustrations
- Style
- Professional formatting

Suzette M Swart