Exploring situation-specific emotional episodes among nurses: Application of the componential emotion approach

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REMARKS

The following information should be taken into account upon reading the mini-dissertation:

- The reference style followed as well as the editorial style was considered from the Publication Manual (6th edition) of the American Psychological Association (APA). This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University.
- The mini-dissertation, which is submitted in the form of three chapters, of which chapter 2 is the research article. The guidelines of the South African Journal of Industrial Psychology (SAJIP) governed chapter 2. However, the length of the article exceeds the requirements of SAJIP. With regards to the tables, APA style is utilised as the guidelines are similar to those of SAJIP. Chapter 1 and 3 followed the guidelines pertaining to the research unit, WorkWell.

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"*For I know the plans I have for you, declares the Lord, plans to prosper you and not to harm you, plans to give you hope and a future*." Jer 29:11

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I, **Ms Cecilia van der Walt,** hereby confirm that I took care of the **editing** of the **mini-dissertation** of **Ms Juan-Ri Potgieter** titled **Emotional Episodes Among Nurses: Application of the Componential Emotion Approach.**

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DECLARATION OF AUTHENTICITY OF RESEARCH

I, Juan-Ri Malanie (J.M) Potgieter, declare that this specific mini-dissertation "*Exploring situation-specific emotional episodes among nurses: Application of the componential emotion approach*" is distinctly my own work. The interpretations, ideas, and viewpoints formulated within this study are those of the author, accounted for by the relevant references as from the literature, which are listed in the reference list. Furthermore, the content of this study will only be submitted for the relevant qualification, and no other, as well as only submitted to the appointed tertiary institution.

J.M Potgieter



November 2015

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SUMMARY

Title: Exploring situation-specific emotional episodes among nurses: Application of the componential emotion approach

Keywords: Componential emotion approach (CEA), emotions, emotion theories, nurses, South Africa, critical incidents, positive experiences, negative experiences.

Healthcare, within South Africa, has become a prevalent focal matter in several discussions due to the inevitable challenges (e.g., HIV/AIDS, tuberculosis, poverty, affordable health care, insufficient hospital beds) it is faced with regards to the provision of quality healthcare, as well as the current state of affairs within healthcare. Not only is healthcare a threat to the population, but it also places immense pressure on the healthcare professionals who are required to provide quality care to an estimate of 53 million people, effectively. As such, due to the challenges, the healthcare professionals are continuously confronted with incidents within the workplace that is deemed as either positive or negative, which evokes certain emotions. This is especially important among nurses as emotions are extremely imperative to enable them to adapt to these incidents and to function optimally; thus making the study of emotions of great importance among nurses.

The objective of this study was to firstly explore the typical emotional experiences or incidents that nurses are confronted with and secondly to apply a comprehensive emotion theory, known as the componential emotion approach (CEA), to study the meaning of emotions during these emotional experiences. To achieve the objectives of the study, a qualitative research paradigm was followed, using the transcendental phenomenological strategy. As for the sampling, a purposive sampling technique was considered best in which nine (N = 9) participants, from the Unit of Open Distance Learning (UODL) voluntarily took part in the study. The data was collected by means of several techniques, such as in-depth interviews, participant observations, and field notes. Four data analysis methods were followed: Critical Incident Analysis, Directed Content Analysis, Van Kaam's Adapted Phenomenological Analysis, and the GRID-based componential emotion analysis.

Results pertaining to this study identified several positive and negative emotional experiences that nurses are confronted with on a daily basis, which were categorised as organisational

terms: Meaning at work, Job satisfaction, Occupational health and safety, and Organisational best practise. Results indicated that during the experience of emotional episodes, certain emotions are evoked which, in turn, considers changes in five emotion substrates (e.g., appraisals, subjective feelings, motor expressions, action tendencies, and physiological occurrences) within nurses. As the objective of this study was to explore these five substrates among nurses within different emotional experiences, results further indicated that nurses were able to report on all of the five components, leading to the construction of a universal essence. Recommendations regarding future research and practise were made. Nurses should be made aware of the typical emotional experiences that they are confronted with as to understand the meaning of their emotions. Managers, on the other hand, should be made aware of strategies as to how to aid nurses in the management of emotions as it impedes their ability to provide quality care.

OPSOMMING

Titel: Ondersoek van situasie-spesifieke emosionele episodes onder verpleegsters: Toepassing van die komponensiële emosie benadering

Sleutelwoorde: Komponensiële emosie benadering (CEA), emosies, emosie teorieë, verpleegsters, Suid-Afrika, kritiese insidente, positiewe ervarings, negatiewe ervarings

Gesondheidsorg, in Suid-Afrika, het ’n algemene besprekingpunt geword in verskeie gesprekke weens die onvermydelike uitdagings (bv., MIV/Vigs, tuberkulose, armoede, onbekostigbare gesondheidsorg, onvoldoende hospitaalbeddens) waarmee gesondheidsorg gekonfronteer word met betrekking tot die voorsiening van gehalte gesondheidsorg , sowel as die huidige stand van sake binne gesondheidsorg. Nie net is gesondheidsorg ’n bedreiging vir die bevolking nie, maar geweldige druk word op die professionele verskaffers van gesondheidsorg geplaas, wat goeie gehalte sorg moet verskaf aan omtrent 53 miljoen mense. As gevolg van die uitdagings, word die professionele verskaffers van gesondheidsorg voortdurend gekonfronteer met voorvalle in die werksplek wat geag word as positief of negatief, wat sekere emosies ontlok. Dit is veral die geval onder verpleegsters. Emosies is uiters belangrik omrede dit hulle in staat stel om aan te pas by hierdie voorvalle en om optimaal te funksioneer; dus maak dit die studie van emosies van groot belang onder verpleegsters.

Die doel van hierdie studie was om eerstens die tipiese emosionele ervarings of voorvalle wat verpleegsters mee gekonfronteer word te ondersoek en tweedens om ’n omvattende emosie teorie, bekend as die komponensiële emosie benadering (CEA), toe te pas, wat die betekenis van emosies bestudeer in hierdie emosionele ervarings. Om die doelwitte van die studie te bereik, is ’n kwalitatiewe navorsing paradigma gevolg, met behulp van die transendentale fenomenologiese strategie. In verband met die steekproefneming, is ’n doelgerigte steekproeftrekking tegniek gebruik waarin nege (N = 9) individue, van die Eenheid van Open Afstandsonderrig (UODL) vrywillig aan die studie deelgeneem het. Die data is ingesamel deur middel van verskeie tegnieke, soos in-diepte onderhoude, deelnemer waarnemings, en veld-notas. Vier data-analise metodes is gevolg: Kritieke Insident Analise, Gedirekteerde inhoudsanalise, Van Kaam se Aangepas fenomenologiese analise, en die GRID-gebaseerde komponensiële emosie analise.

Resultate met betrekking tot hierdie studie het verskeie positiewe en negatiewe emosionele ervarings waarmee verpleegsters gekonfronteer word op ’n daaglikse basis geïdentifiseer, wat gekategoriseer is as organisatoriese terme: Betekenis by die werk, Werkstevredenheid, Beroepsgesondheid- en veiligheid en Organisatoriese beste praktyke. Resultate het aangedui dat gedurende die ervaring van emosionele episodes, sekere emosies ontlok word, wat op sy beurt, veranderinge in vyf emosie substratas uitlok (bv., beoordeling, subjektiewe gevoelens, motor uitdrukkings, aksie neigings en fisiologiese gebeurtenisse). Die doel van hierdie studie was om hierdie vyf substratas, onder verpleegsters, binne verskillende emosionele ervarings te ondersoek en resultate het aangedui dat verpleegsters in staat was om oor al die vyf komponente te rapporteer, wat gelei het tot die konstruksie van ’n algemene profiel. Aanbevelings ten opsigte van toekomstige navorsing en praktyk was gemaak. Verpleegsters moet bewus gemaak word van die tipiese emosionele ervarings wat hulle mee gekonfronteer word om sodoende hulle tipiese emosies in sulke gevalle te verstaan. Bestuurders, aan die anderkant, moet bewus wees van strategieë wat verpleegsters kan help om hulle emosies te bestuur sodat dit nie hulle vermoë om gehalte sorg te bied, belemmer nie.

CHAPTER 1

INTRODUCTION

Introduction

This mini-dissertation focuses on the exploration of the situation-specific emotional episodes among nurses: Application of the componential emotion approach. Within this chapter, specific attention is given to the prominent research gap and/or problem, supported by sufficient evidence. Therefore, the purpose of this mini-dissertation is to address the research problem by firstly posing various questions and consequently determining the research objective. Thereafter, a comprehensive research method is discussed pertaining to precise steps as to how the research is executed and quality maintained. Lastly, a summary of the chapter is provided.

1.1 Problem statement

According to the National Department of Health (NDH, 2007) and the World Health Organisation (WHO, 2014), health care is noticeably bound by an ethical framework that governs the measurement, improvement, and maintenance of high-quality care with regard to all citizens. Not only does this account for measuring the gap between the standards and actual practice, but also to address these gaps. Within South Africa, the health sector is mandated to provide such quality care to an estimate of 53 million people effectively on an annual basis (Statistics South Africa, 2013). Of this population 61.22% (mostly low socio-economic status) visit the public sector and 24.3% (high socio-economic status) visit the private health sector. In addition, the government spends about 8% of the gross national product (GDP) on the health sector, entrusted to the private and public health sector (NDH, 2007; The World Bank, 2014; WHO, 2014). However, despite the economic investment in and pressure to provide quality care, the nursing environment as a whole can be seen as a complex profession that is characterised as stressful on the one hand (Humpel & Caputi, 2001; Landa & Lopez-Zafra, 2010; Suresh, Matthews, & Coyne, 2012) and meaningful and fulfilling on the other (Burhans & Alligood, 2010; Rose & Glass, 2010).

Nurses attribute a sense of meaning when they contribute to their profession (Beukes & Botha, 2013; Janse van Rensberg, Poggenpoel, & Myburgh, 2012; Rose & Glass, 2010). For instance, it has been indicated that nurses feel a sense of gratification when assisting patients, which contributes to positive experiences nurses have in their work environment (McQueen, 2004; Rose & Glass, 2010). Outcomes such as seeing the presence of healing, improvement within

patients' health status (Newman & Maylor, 2002; Utriainen & Kynga, 2009), and feeling successful in developing trust, are some of the positive experiences nurses have within the nursing environment. Furthermore, it has been indicated that nurses experience feelings of connectedness as they engage with their patients, which is rewarding as they concentrate on the psychological, social, and spiritual needs of the patient, ultimately creating a closer relationship between the patient and nurse (Friedman & Ortlepp, 2002; Jackson, Firtko, & Edenborough, 2007; Rose & Glass, 2010; Wilkin & Slevin, 2004). Thus, nurses tend to attach meaning to the relationship that develops between them and the patients (Belcher & Jones, 2009; Bridges *et al*., 2013; Wilkin & Slevin, 2004).

In addition to the relationship nurses develop with their patients, nurses hold values of empathy (Lelorain, Brédart, Dolbeault, & Sultan, 2012; McKenna, Boyle, Brown, Williams, Molloy, Lewis, & Molloy, 2012). That is, nurses place themselves in the shoes of the patients to understand their needs as well as possible, they respond in a warm and respectful manner during the patients' most embarrassing situations, they seek to understand critically ill patients' needs by trying to imagine what they experience, and acknowledge the patient as an individual seeking help (Burhans & Alligood, 2010; Lelorain *et al*., 2012). Some of the most significant manners in which nurses react with empathy can be attributed to them responding in a physical manner such as with touch (bearing in mind the sensitivity considerations), they sit with the patients to show their willingness to listen, and speak in a tone that is characterised by sincerity and understanding (Parvan, Ebrahimi, Zamanzadeh, Seyedrasooly, Dadkhah, & Jabarzadeh, 2014). Furthermore, they extent their concern to the patients' immediate family and acknowledge the impact the patients' health status has on them (Coetzee & Klopper, 2010; Wilkin & Slevin, 2004). These positive outcomes for nurses are seen as highly rewarding as they are able and are empowered to make a difference in people's lives (Laschinger, Gilbert, Smith, & Leslie, 2010; Rose & Glass, 2010).

However, such positive experiences are not the case in most instances within an environment meant for taking care of patients. The nursing environment can also be seen as stressful in the sense that nurses experience extraordinary work demands (Rothmann, van Der Colff, & Rothmann, 2006; Unruh & Nooney, 2011). For example, nurses work in an environment that is exposed to serious critical incidents, such as, immense exposure to HIV/Aids-infected patients, drawing blood or injecting patients without the necessary protective gear (Hartley, 2005; Ncama & Uys, 2003), and needle prick injuries, to name but a few demands (Mothiba,

Lebese, & Maputle, 2012; Rothmann *et al.*, 2006). In addition, they also encounter verbal and non-verbal threats made by patients, verbal and physical sexual harassment, physical intimidation (McKenna, Poole, Smith, Coverdale, & Gale, 2003), violent and aggressive patients (Crabbe, Bowley, Boffard, Alexander, & Klein, 2003), humiliation, criticism, and disinterest from patients, as well as inappropriate racial comments (McKenna *et al.*, 2002). Such negative experiences lead nurses to have increased levels of stress, burnout, and ultimately work-home conflict (Bennett & Louw, 2008; Hart & Warren, 2013; Laschinger, Grau, Joan, & Piotr, 2012; Sumner & Townsend-Rocchiccioli, 2003).

Several factors in the nursing environment related to stress have been linked to the following: increased workload, shortage of personnel (French, du Plessis, & Scrooby, 2011; Hart & Warren, 2013; van der Colff & Rothmann, 2009), higher turnover rate, task overload (French *et al*., 2011; van der Colff & Rothmann, 2012), increased budget constraints, medical inflation, overcrowded hospitals (Hall, 2004; Unruh & Nooney, 2011), long working hours in a physically demanding environment (Koekemoer & Mostert, 2006; Unruh & Nooney, 2011), low work remuneration and low work status (Koekemoer & Mostert, 2006; van der Colff & Rothmann, 2009), insufficient resting periods (French *et al*., 2011), collective bargaining disagreements (Hart & Warren, 2013), and interacting in occupational hazardous conditions (Rothmann *et al*., 2006). Such stress-related factors are equated with anxiety, hopelessness, vulnerability, and emotional distress (Karimi, Leggat, Donohue, Farrell, & Couper, 2013), and impacts negatively on the services nurses provide to their patients. This leads to nurses feeling dissatisfied, unmotivated (Hall, 2004; van der Colff & Rothmann, 2009), overwhelmed, incompetent, a sense of low self-esteem, vulnerable, and compassion fatigue (Elkonin & van Der Vyver, 2011; Jisika, 1995).

Compassion fatigue (within the context of nursing) has been described in terms of situations that cause nurses to either avert their own feelings or experience anger and hopelessness as a response to the devastating illnesses and trauma patients go through as well as the periodic exposure to death (Coetzee & Klopper, 2010; DeAraugo, DaSilva, & Francisco, 2004; Joinson, 1992; Yoder, 2010). Furthermore, compassion fatigue is indicated to be a product of burnout and can be intensified by excessive demands (Edwards, Burnard, Coyle, Fothergill, & Hannigan, 2000; Garrett & McDaniel 2001; Kilfedder, Power, & Wells, 2001). For nurses, it has been reported that the effects of burnout can become detrimental as it manifests itself in the form of physical depletion, depersonalisation, development of a negative attitude,

emotional labour, and mental and emotional exhaustion (Coastes, 2001; Jenull & Wiedermann, 2013; van der Colff & Rothmann, 2009). Such negative consequences of burnout can be expected to trigger negative emotions which can affect the type of service nurses provide to their patients. As emotions are tied to how individuals think and react in the health care environment (Mayer, Caruso, & Salovey, 1997; Matthews, Zeidner, & Roberts, 2004), it is therefore imperative to understand the emotion-eliciting situations and reactions nurses have within their work environment (Kaur, Sambasivan, & Kumar, 2013; McQueen, 2004). However, before the emotion-eliciting situations can be understood, the concept of "emotion" must firstly be explored within the health care context to determine how it is defined in such situations.

Research in emotions has previously focused on individual components of emotions: *appraisals* (Smith & Ellsworth, 1985; Mesquita & Frijda, 1992; Roseman, 1984; Scherer, 1984; 2001; Scherer & Wallbott, 1994), *physiological changes* (Cannon, 1927; James, 1884a; 1884b; 1890), *motor expressions* (Ekman, 1979; 1984; Ekman, 1992; Ekman & Friesen, 1969; 1971), *action tendencies* (Frijda, 1986; 2007b; Frijda & Parrott, 2011; Mesquita & Frijda, 1992), and *subjective feelings* (Barrett & Bar, 2009; Izard, 1990; Russel, 1980; 2003). However, research in emotions has now moved from a single criterion to a component emotion approach (CEA) (Fontaine, Scherer, & Soriano, 2013; Fontaine, Scherer, Roesch, & Ellsworth, 2007; Prinz, 2004; Scherer, 1987; 2001; 2005), within which an emotion is defined as "*an episode of interrelated, synchronized changes in the states of all or most of the five organismic subsystems/components in response to the evaluation of an external or internal stimulus event as relevant to major concerns of the organism*" (Scherer, 1987, p. 697). The CEA suggests that emotional events and the reactions thereof can be appraised within a set of multiple levels of processing criteria (Scherer, 2009), following changes in all five components/subsystems.

The five organismic systems/components or the CEA can be identified as i) *event evaluation* (cognitive evaluation and emotional attachment towards a situation, such as acknowledging danger upon seeing a gun) (Scherer & Wallbott, 1994), ii) *bodily reactions* (physical representation of an emotion, such as rapid heartbeat) (Mesquita & Frijda, 1992), iii) *expressions* (facial and vocal representations, such as eyes wide and speaking loudly) (Ekman, 1979), iv) *behavioural tendencies* (inclination towards a certain action, such as fleeing or attacking) (Frijda, 1987; 2007a), and v) *feeling* ("*monitoring of internal state and organism-environmental interactions*", such as unpleasant, felt bad) (Scherer, Bänziger, & Roesch, 2010,

p. 49). As a result, the CEA plays a vital role in the manner in which an individual understands and manages emotions (Scherer, 1993).

Although the concept of CEA has been explored in western countries, albeit just focusing on individual components, within the South African context, only limited studies have been conducted with regard to the CEA (see. Fourie, 2010; Jonker, van der Merwe, Fontaine, & Meiring, 2011; Masombuka, 2011; Mojaki, 2011; Nicholls, 2008; Rauch, 2009; van der Merwe, 2011). That is, research related to the CEA in South Africa has focused on specific emotion dimensions as related to various cultures such as Afrikaans (see Jonker *et al*., 2011) and Setswana (see. Mojaki, 2011). However, no other study has included the synchronised dynamic process regarding all five subsystems in a nursing context. As such, the current study is an extension of previous studies focusing on including all five components in a nursing context. It is particularly important to study the process in its entirety due to the fact that significant inferences can be made regarding human interaction and behaviour.

Hence the main objective of this study is to firstly, identify the emotional experiences nurses are exposed to on a daily basis. Secondly, the CEA is explored, taking into consideration all five components of CEA. Thereafter, an eidetic profile for the CEA among nurses is constructed, as the profile will provide a better understanding of the synchronised process which occurs as a result of a singular appraisal. The eidetic profile will be constructed based on a general representation of emotions among nurses in a health-care setting, and not divided according to a specific sector such as the private and public sector.

1.2 Research questions

This research study is guided by the following research questions:

1. How is the componential emotional approach conceptualised in the literature?
2. What situation-specific emotional episodes are experienced among nurses?
3. How is the appraisal component of the CEA experienced among nurses within different situation-specific emotional episodes?
4. How is the subjective feeling component of the CEA experienced among nurses within different situation-specific emotional episodes?

5. How is the action tendency component of the CEA experienced among nurses within different situation-specific emotional episodes?
6. How is the motor expression of the CEA experienced among nurses within different situation-specific emotional episodes?
7. How is the physiological change component of the CEA experienced among nurses within different situation-specific emotional episodes?
8. What recommendations can be made for future research and practice?

1.3 Contributions

1.3.1 Contribution for the Individual

As nurses work in an emotional-eliciting environment, they display certain emotional episodes and processes which, in turn, either affect them in a positive or negative manner. Not only is it required of them to provide care of the utmost quality, but also to regulate themselves, especially in negative situations. As such, the study enhances the nurses' awareness of the emotional episodes and processes that occur within them and consequently assists them in managing those emotional episodes. Thus, in turn, they are made aware of strategies that enhance their ability to provide quality care.

1.3.2 Contribution for the field of Industrial Psychology

According to the Health Professions Act (1974), the role of an Industrial Psychologist, within practice, is to conduct research which will aid in the understanding, modification, and enhancement of individual, group, and organisational behaviour. Therefore, the study explores those critical incidents nurses are confronted with on a daily basis which impedes their performance and affects their behaviour at work (Bakker & Heuven, 2006). In addition, it is expected of nurses to (non)display certain emotions or emotion-related constituents as a means to endure and survive in such a demanding environment, which gives way to the exploration of the componential emotion approach. As such, the researcher explores those critical incidents and emotion theory in order to comprehend what they have to deal with on a daily basis, as well as how they deal with their own inner emotion functioning. The proposition provides an eidetic profile of the results which aids the field of Industrial Organisational Psychology (IOP)

in the development and execution of intervention strategies or programmes which understand human behaviour, yet also enhance it.

1.3.3 Contribution towards the Literature

The most significant influence of this study contributes to the literature, especially with regards to the use of the componential emotion approach (CEA) and the critical incident theory (CIT) within South Africa, among nurses. A limited number of studies have been conducted with regard to the use of the componential emotion approach and critical incident theory within South Africa, and thus requires further exploration in order to test and/or extend the current theories in this context. As such, the contribution exhibits results related to the exploration and description of the theories.

1.4 Research objectives

The research objectives are divided into general objective and specific objectives.

1.4.1 General objective

The general objective of this research is to explore the situation-specific emotional episodes experienced among nurses in accordance with the componential emotion approach.

1.4.2 Specific objectives

- To conceptualise the componential emotion approach according to the literature.
- To explore the situation-specific emotional episodes among nurses.
- To determine how the appraisal component of the CEA is experienced among nurses within different situation-specific emotional episodes.
- To determine how the subjective feeling component of the CEA is experienced among nurses within different situation-specific emotional episodes.
- To determine how the action tendency component of the CEA is experienced among nurses within different situation-specific emotional episodes.
- To determine how the motor expression component of the CEA is experienced among nurses within different situation-specific emotional episodes.

- To determine how the physiological change component of the CEA is experienced among nurses within different situation-specific emotional episodes.
- To make recommendations for future research and practice.

1.5 Research design

1.5.1 Research approach

As for the nature of the research study, a qualitative, phenomenological research design is suitable within this context, using the Critical Incident Technique (CIT) as a data gathering method. The qualitative approach is utilised to describe, understand, and capture the essence of a certain complex phenomenon from the participant's viewpoint (Edmonds & Kennedy, 2013; Leedy & Ormrod, 2014; Merriam, 2011). Moreover, the focus is on a naturalistic method where the researcher seeks to understand the phenomenon in the participant's natural setting (Bowen, 2008; Rolfe, 2006; Yilmaz, 2013). de Vos, Strydom, Fouché and Delport (2011) and Moxham (2012) concur with the above by adding that the researcher, in particular, draws his/her own conclusion from the data as from what they understand and apprehend concerning the complex phenomenon. The inferences made are expressed in a non-statistical manner, which contributes to the development and extension of a particular theory (Borbasi & Jackson, 2012; Burns & Grove, 2009). A qualitative design is considered as most applicable since the researcher desires to gain a deeper understanding of the emotional experiences, according to the componential emotion approach, and the situation-specific emotional episodes experienced by nurses (Burns & Grove, 2009; Malagon-Maldonado, 2014).

The purpose of the phenomenological methodology is to describe the participants' immediate experience of the phenomenon under study and to determine the conscious perceptions, sensations, and meanings they derive from the phenomenon (Burns & Grove, 2009; Giorgi, 2005; Moustakas, 1994). Furthermore, the goal is to understand how the participants construct reality by means of exploring the meaning, composition, and core of the phenomenon (Edmonds & Kennedy, 2013). Specific attention is given to the participants' "life world" and intentionality, as the notion exists that an intentional correlation exists between the participants' life world and the situation they are exposed to (Moustakas, 1994; Wertz, 2005). In other words the everyday, taken for granted experiences of the participants can be reduced to a meaningful essence as constructed by the participant (Creswell, 2013; Finlay, 2011; Moustakas, 1994).

In respect of the nurses, the motive for choosing this methodology is due to the researcher desiring to describe the meaningful essence of the phenomenon from several nurses'

experiences and viewpoints, and consequently, to take those individual experiences and construct a textural, structural, and universal description (Creswell, 2013; Moustakas, 1994). As only limited studies have been conducted with regard to the CEA phenomenon, the researcher's main goal is to construct a universal or eidetic profile as a means to theory extension for the South African context (Burns & Grove, 2009).

The researcher focuses their attention on an inductive reasoning paradigm. Inductive reasoning is known as a "bottom up" approach, focusing firstly on the specific inferences, moving over to the general inferences of which a universal conclusion is constructed with regard to the theory or phenomenon (Burns & Grove 2009; Ingham-Broomfield, 2015; Jirojwong, Johnson, & Welch, 2014). Inductive reasoning associates itself with participant "life world" observations, consequently exploring the patterns and relations in the experience of a certain phenomenon in order to obtain a theoretical comprehension, which includes a textural, structural, and universal description, of the phenomenon under study (Leedy & Ormrod, 2014; Ritchie & Lewis, 2003). In addition, the main notion for using an inductive approach is due to the concept of theory formation (Nicholls, 2009b). As such, the researcher proposes a descriptive theory for the South African Context, with regard to the CEA.

Lastly, the researcher proposes their ontology and epistemological assumptions to be guided by the constructivism (also social constructivism) paradigm (de Vos *et al*., 2011; Guba & Lincoln, 1994). Social Constructivism is characterised as the belief that human phenomenon is constructed and given meaning due to social and interpersonal interactions (Creswell, 2013; Gergen, 1985). Essentially, the manner in which the participants reflect upon, feel, and act within a certain phenomenon is due to social influences and their imagination beliefs (Creswell, 2013). Therefore, the researcher using this assumption lay claim that individuals create meaning as a result of human interaction and also act accordingly (Kim, 2001). Hence, social constructivism is chosen due to the fact that the participants' (nurses) core responsibility is interacting and taking care of others and therefore construct the experiences they undergo (Andrews, 2012; Bahari, 2010).

1.5.2 Research strategy

Within phenomenology, two main strategies can be utilised: *Hermeneutics, Interpretive* as discovered by Martin Heidegger (1889-1976) or *Transcendental, Descriptive* as originated from Edmund Husserl (1859-1938). In short, *hermeneutics, interpretive* is mainly used for in-depth exploration and interpretation of a certain phenomenon in order to attain the deeper meanings, causes, reasons, and insinuations for a certain phenomenon. It aids in the exploration of every-day practical concerns as in how people develop and construct interpretations in relation to how they experience a certain phenomenon (Cammarata, 2012; Liamputtong, 2013; Silverman, 1994; van Manen, 1990). However, for purposes of this specific study, the researcher deems the *transcendental, descriptive* approach to be contributing most to the goals and research questions of the study.

Within this strategy, the focus is less on the interpretations of the researcher and more on the exploration and description of the participants' experiences (Creswell, 2013). Edmonds and Kennedy (2013) concur with Creswell (2013) adding that the transcendental process is descriptive in nature in the sense that the essence of the participants' experience is described in detail. Husserl (1970) believed that individual portrays a significant amount of conscious inferences with regard to the experience of a certain phenomenon as displayed by their human behaviour and actions. This is essential as human behaviour can be better understood and interpreted, especially during difficult situations or environments such as with nursing. In addition, descriptive phenomenology disqualifies any predetermined assumptions about the phenomenon, and allows the phenomenon to unfold as the participants describe it (Giorgi, 2011). However, the researcher maintains an open attitude in order for that phenomenon to evolve into a meaningful experience. Therefore, Husserl (1970) emphases three very important concepts which enable the emergence of meaningful descriptions: intentionality, bracketing, and reduction (Moustakas, 1994).

Intentionality can be described as the notion of everything constructed in the human mind as intentional (Moran, 2000; Moustakas, 1994). In other words, every experience is due to an intentional cognitive process, whereby the phenomenon experienced by the participants has meaning and it is real to them (van Manen, 1990). On the other hand, *Bracketing,* can be referred to as a methodological strategy in which the researcher puts aside any preconceived ideas, perceptions etc. with regard to the data to allow the data to speak for itself and to conduct

the literature review after the data analysis process (Chan, Fung, & Chien, 2013). This strategy enables the researcher not to influence the data or the participants as no expectation is encouraged (Carpenter, 2007; Polit & Beck, 2008). Lastly, *Reduction*, is known as the notion of reducing the phenomenon into a pure, meaningful phenomenal realm. In other words, the researcher interprets the data in an unprejudiced manner as to encourage a comprehensive description of the phenomenon (Dowling, 2007). As such, the researcher utilises all three concepts as a means to sufficiently study and describe the essence of the phenomenon.

In this strategy, the researcher develops a *textural description* (what the participants experienced), a *structural description* (how the participants experienced a certain phenomenon), and a combination of the textural and structural description to convey a *universal essence* (or eidetic profile) of the phenomenon (Creswell, 2013; Moustakas, 1994). The reason for this strategy is firstly to ascertain what nurses experience in their daily working environment in terms of the critical incidents and emotion episodes (textural description). Secondly, the researcher aims at describing how the nurses experience the different emotion components from the CEA phenomenon (structural description), comprising all five components. Lastly, the researcher aims at developing a universal description (or eidetic profile) of the emotional experience, comprising all the facets, such as the critical incidents, the CEA, and emotion episodes within the South African Context.

1.6 Research method

1.6.1 Literature review

A comprehensive literature review regarding the componential emotional approach, job resources, job demands, health sector, nurses, critical incidents, emotional intelligence, and culture are carried out to obtain relevant and recent information with regard to the study. Articles, books, and journals that have been published between the time period of 2000 and 2014 are utilised. However, older sources (such as 1970-1999) are utilised as it is necessary to go back to the original source. The sources that are consulted include: Google Scholar, Web of Science, Science Direct, Ebsco Host, and SAe Publications. Other means of gaining information are by making use of the Internet and search for scientific articles in accredited scientific journals as well as by using valid and relevant textbooks. The following journals, for example, are consulted: *Journal of Nursing; Journal of Industrial Psychology; Journal of*

Emotion, Evolution, and Rationality; Journal of Clinical Nursing; Journal of Social Science Information; Journal of Cognition and Emotion; Journal of Personality and Social Psychology; Journal of Nursing Administration Quarterly; Journal of Nursing Management; Applied Nursing Research; Journal of Health Psychology; Emergency Medicine Journal; Nursing Review; Journal of Traumatic Stress; Journal of Psychiatric and Mental Health Nursing; Journal of Personality; Emotion review; and Psychological Review.

1.6.2 Research setting

In order for the researcher to maximise the opportunity of engaging in the research problem, it is of the utmost importance to firstly identify the problem itself, and consequently the significance of the problem (de Vos *et al*., 2011; Erlandson, Harris, Skipper, & Allen, 1993). As the study is conducted among any nurse participant within South Africa, Potchefstroom is chosen as the research setting as a result of easy accessibility, cooperation with the respondents is easily achieved due to the familiar environment, and the researcher can freely move about in the setting and attain the richest information required. However, to avoid any form of subjectivity in choosing the setting, a pilot study (described below) is conducted to enhance the validity of the study.

The research setting is focused on a secure and private office at the Unit of Open Distance Learning (UODL), situated on the Potchefstroom Campus of North-West University. A consultation room is organised for the in-depth one-on-one interviews and due care is taken to ensure the avoidance of any disturbances, such as placing a 'do not enter' sign on the door. Upon the arrival of the participants, the researcher ensures to greet the participants in a welcoming manner to emphasise a benign space that allows the participants to comfortably share their stories; explain the purpose and goals of the study, as well as informs the participants that the process is strictly voluntary; asks permission to tape-record the interviews; allows time to complete the informed consent whereby the participant agrees to the process; and opens a safe space to raise any questions or concerns.

1.6.3 Entrée and establishing researcher roles

The data is collected from nursing students attending courses with the Unit of Open Distance learning in Potchefstroom. Permission from the nursing department heads as well as the UODL unit management was obtained earlier in the year for conducting the study. Permission was gained by meeting with the departments and discussing the ethical considerations, purpose, and practical implications (e.g., data collection, office allocation, etc.) of the study. The permission was made valid by verbal consent. After the permission process, the next step informed the participants of the purpose, objectives, and practical considerations of the study to gain their permission and buy-in. This is achieved by the utilisation of a gate keeper. A gate keeper is seen as an individual that forms the link between the researcher and the participant. They hold the authority to gain access within the research setting and to allocate possible ideas of reaching the participants (de Vos *et al*., 2011; Ritchie, Lewis, McNaughton Nicholls, & Ormston, 2014).

The next step entails obtaining permission from the North-West University's Ethics Committee and the Research Committee upon presentation of the proposal. The researcher presents her proposal to the board and includes the purpose of and need for the study, as well as all the practical arrangements with regard to data collection, recording of data, ethical and confidential considerations, etc. Once permission is granted, the researcher commences with the research.

The researcher undertakes several roles such as research coordinator, participant interviewer, facilitator, and data analyst (Creswell, 2009; de Vos *et al*., 2011). With regard to the *research coordinator role*, this entails the implementation and management of the comprehensive research project such as obtaining permission to access the research field, allocating the research participants, obtaining informed consent from the participants, collecting data by means of interviews, quality measures with regard to safe-keeping of data, data analysis etc. Subsequently, the researcher shifted into the role of an interviewer.

In terms of the role of *interviewer*, the researcher utilises various questioning strategies, while observing their verbal and non-verbal behaviour. The interview is used for purposes of obtaining data as the participants share their stories, experiences, and viewpoints (Ritchie & Lewis, 2003). During the interview, the researcher makes sure to actively listen to the participants while they share their experiences; uses empathetic attending skills as this study is more of a sensitive study; and uses effective responding and probing skills in order to obtain

sufficient information (Ivey, Ivey, & Zalaquett, 2010; Martin, 2014). Thereafter, the researcher utilises the responsibilities of a *facilitator* in guiding the interview and empowering the participants to adequately and comprehensively share their stories (Townsend & Donovan, 2014). Lastly, the researcher follows the role of *data analyst*, which includes transcribing, coding, and analysing the data (Creswell, 2009).

The researcher's objectivity/subjectivity is also maintained and addressed during the study. It is imperative to ensure that the researcher's viewpoints and beliefs are well-known to the researcher herself as this can influence the study. Thus, the researcher remains objective throughout the study and is not emotionally involved (Ritchie & Lewis, 2003).

1.6.4 Sampling

The sampling method utilised for this study is purposive sampling technique. In purposive sampling participants are chosen for a specific purpose according to the researcher's own judgement (Leedy & Ormrod, 2014). The reason for choosing purposive sampling is the fact that the participants contain most of the characteristics that represent the purpose of the study best (Gerrish & Lacey, 2010; Grinnell & Unrau, 2008). Furthermore, the sample consists of particular features, behaviours, and experiences which enable the researcher to, in-depth, explore, understand, and describe the unique themes, relations, and implications of the phenomenon (Ritchie & Lewis, 2003; Robinson, 2014). As such, within purposive sampling, a specific set of criteria is required for this study.

As the sample differs in terms of age, gender, and ethnic origin, the following criteria for selecting a sample size includes:

- Participants situated in Potchefstroom.
- Participants with different ethnic groups (language, religion, age).
- Participants willing to participate in the in-depth interviews.
- Participants willing to participate voluntarily in the research and show openness towards the process.
- Participants are efficient in English or Afrikaans, good communication skills.
- Participants have a minimum of three years' experience in the nursing environment.

- Participants are registered with the South-African Nursing Council (SANC) as a professional nurse.

The sample size depends on the point of data saturation and therefore no specific sample size can be indicated (Fusch & Ness, 2015). However, for phenomenological studies, the sample size should include at least 6 participants in order to validate the findings (Morse, 1995; 2000). Several studies (see. Bedwell, McGowan, & Lavender, 2014; Chase, 1995; Jackson & Morrissette, 2014; Morley, Briggs, & Chumbley, 2015; Won, 2015; Yam & Rossiter, 2000) have produced significant results with a sample size smaller than 12.

Data saturation refers to the point where the researcher finds no additional information to the study and similarities are also found within the results (Glaser & Strauss, 1967; Mason, 2010). Trotter (2012) concur with Glaser and colleague by adding that data saturation has been achieved as soon as all the research questions have been comprehensively explored and sufficient data can be reported. As such, the researcher conducts interviews until all the research questions have been answered and the researcher identify that the data provided can aid in the construction of a textural, structural, and eidetic profile. In addition, the researcher desires to enhance the theoretical understanding and extension of a phenomenon within a specific target population (nurses), and therefore quality of data, rather than quantity is focused on (Carlsen & Glenton, 2011; Collingridge & Gantt, 2008).

1.6.5 Data collection methods

Denzin (2006; 2009) argues that it is practically impossible to obtain a meaningful essence of a certain phenomenon by which a singular method is utilised. Therefore, several methods or techniques are described as a means to collect data.

1.6.5.1 Critical Incident Theory (CIT): As swiftly introduced above, the critical incident technique is utilised for this study as it serves a crucial purpose for the collection of data. The use of the critical incident technique dates back 60 years where Flanagan (1954) first introduced the CIT. According to Flanagan (1954), this particular method depends on a set of processes as a means to collect, investigate, and classify human behaviours without being actually present during the occurrence of the certain behaviour. He constructed this technique in order to differentiate between effective and ineffective behaviours by exploring the critical

incidents or events participants had explained during a one-on-one interview. Chell and Pittaway (1998) provide their understanding of the CIT as using a qualitative facilitative procedure which investigates the significant critical incidents individuals experience within their working environment, documenting the way in which they manage the critical incidents, and exploring the outcomes in terms of the perceived effects, whilst taking into consideration the individual's cognitive, affective, and behavioural elements. The CIT is applied in the sense that the participant is requested to describe an event or occurrence, which allows for certain inferences to be made regarding their behaviour or predictions to be made concerning the individual under study. In other words, describing a certain event or occurrence which significantly contributes in either a positive or negative manner (Bitner, Booms, & Tetreault, 1990).

The essence here lies in the rationalisation, implication, and meaning given to the critical incident as experienced personally by the participant (Angelides, 2001). After the participants have shared their story, several processes should follow. Firstly, the frame of reference should be decided upon with regard to describing the critical incidents, the choice of development of main themes and subthemes, and the reference to previously developed classification schemes (Neuhaus, 1996). Secondly, the information obtained from the participant should consequently be scrutinised in order to be able to identify data themes, obtain insight in terms of the frequency of the factors, and to identify the patterns affecting the certain phenomenon of interest to gain a universal understanding of the critical incident and the effect thereof (Grove & Fisk, 1997; Irvine, Roberts, Tranter, Williams, & Jones, 2008).

The CIT can be seen as a valid and reliable technique to use within service fields as it was scrutinised, tested, and confirmed to be valid by numerous researchers (e.g., Andersson & Nilsson, 1964; Butterfield, Borgen, Amundson, & Maglio, 2005; Ronan & Latham, 1974). In addition, the CIT has also proven justification with other assessment measures, such as STEU and STEM (MacCann & Roberts, 2008).

1.6.5.2 Pilot studies: A pilot study is conducted before commencing with the study in the actual field (Chenail, 2011; Gerrish & Lacey, 2010). According to de Vos *et al*. (2011), it can be beneficial to conduct a pilot study with a similar group of participants with the same characteristics to aid in the identification of trends and to test the research questions. This also aids in the process of reliability to ascertain whether sufficient information can be attained from

the participants in order to best answer the research questions. By testing the nature of the interview questions, one can modify and adapt certain questions that do not provide rich information as needed (Creswell, 2009; de Vos *et al*., 2011; Merriam, 2011). In addition, due to the restricted nature of the use of the CEA within South Africa, the researcher firstly tests the nature of the questions as no other studies can sufficiently support the questions being asked. Also, in order to avoid any bias intentions, a pilot study is beneficial as it determines whether Potchefstroom, as the chosen research setting, provides data to answer all the research questions (Chenail, 2011). However, in the case of Potchefstroom not providing sufficient data to answer the research questions, another setting would have been selected.

1.6.5.3 In-depth interviews: The data is collected by means of in-depth, one-on-one interviews. In-depth interviews are utilised in order to explore the meaning that people attach to the experience so as to understand the reasons behind their human behaviour (Seidman, 2006). In-depth interviews are seen as an essential method within phenomenological studies (Seidman, 2006). In addition, the use of this method not merely discovers the meaning the participants attach to the experience of the phenomenon, but also comprehensively explores all the facets, patterns, relations, and considerations associated with the phenomenon (Dworkin, 2012; Ritchie & Lewis, 2003; Ritchie *et al*., 2014). As such, the researcher comprehensively explore what the nurses' experience in their daily working environment is, as well as the componential experience in accordance with the CEA.

Since the researcher aims at gaining a comprehensive picture of the research under study and the participant's point of view, the researcher should allow participants maximum opportunity for telling their story/experience (Merriam, 2011). The questions that are posed during the interviews are:

- Please think back to the last, most recent emotion you experienced at work and consequently describe the situation as you experienced it?
- What were your emotional reactions within the situation?

The questions indicated above are seen as a framework for asking questions. The rest of the interview process consists of probing questions and open-ended questions. The purpose for using open-ended questions is to obtain further elaboration on the phenomenon, which aids in the construction of a textural, structural, and universal profile of the phenomenon (Moustakas, 1994).

1.6.5.4 Field notes and participant observation: During an interview it is of the essence to make field notes as accurately and in detail as possible to avoid overlooking possible themes, viewpoints, and non-verbal expressions. Field notes can be referred to as written accounts of the things the researcher experiences during the course of the interview and can also include non-verbal behaviour (taking too long to answer a question, being distant, losing focus while having to answer the questions, facial expressions, etc.) (Rossman & Ralli, 2012; Ulin, Robinson, & Tolley, 2005). Field notes assist the researcher in remembering certain statements made during the interview (Babbie, 2007; de Vos *et al*., 2011). However, since the researcher focuses on the non-verbal behaviour of the participants (such as facial expressions of the nurses), field notes are only utilised for significant events or statements. As a result, the researcher does not miss the most significant non-verbal behaviour, which is highly important for the study. In addition, the researcher uses participant observation as a means to obtain the visual representations of typical facial expressions and other motor expressions, as well as to observe the hidden communications not expressed in voice (such as show of hand gestures in order to explain communications) (Kvale & Brinkmann, 2008; Petty, Thomson, & Stew, 2012).

1.6.6 Recording of data

Data is recorded by means of using a digital voice-recorder to accurately capture the essence of the phenomenon under study. Subsequently, the interviews are transcribed and imported into a Microsoft word document, followed by transporting the data from the word documents into a Microsoft excel sheet after data analysis. In addition, the researcher ensures to confirm the quality of the transcribed interviews by listening to the recordings for a second time. By following this procedure, the researcher is able to determine any absent or missing data. Verbal and written consent are obtained from the participants to ensure ethical compliance (de Vos *et al*., 2011; Silverman, 2013). To comply with the ethical requirements of confidentiality, all the recordings are transferred to a safe and secure computer following the interviews. Thereafter, data is transcribed, imported into a word and excel sheet, and safely stored in a password-protected location. Participant anonymity is maintained whereby the tangible documents (e.g., informed consent and completed biographical questionnaires) are only accessible to the researcher. Lastly, the researcher ensures to obtain back-up copies of all the data in the occurrence of possible misplacing the original data.

1.6.7 Data analysis

In order for the researcher to analyse the data in the most efficient manner, three main data analysis techniques are used, namely: Directed Content Analysis (Heish & Shannon, 2005), Van Kaam's Modified Phenomenological Analysis (Moustakas, 1994), and the GRID-based Componential Emotion Process Analysis (Fontaine *et al.*, 2013). In addition to the three techniques, a secondary data analysis technique is used, known as Critical Incident Technique analysis. This technique serves the purpose of classifying incidents into descriptive categories, following situation description verbatim quotes (Gremler, 2004). The motivation for selecting four analysis techniques can be ascribed to the fact that no other technique and/or analysis strategy provides sufficient steps allocated to best answer the research questions and objectives, as well as to interpret the results and report the findings.

1.6.7.1 Directed Content Analysis: In the case of Directed Content Analysis (DCA), an existing theory (known as Componential Emotion Approach) regarding the phenomenon exists which would esteem further description in a context not yet tested (as in South Africa) as beneficial for the research paradigm (Hsieh & Shannon, 2005). DCA differs from the conventional content analysis technique in that preconceived categories are imposed prior to the data analysis process (Humble, 2009). In other words, the researcher proposes pre-determined categories for the data to be reported in (Graneheim & Lundman, 2003; Humble, 2009). As such, the Componential Emotion Approach and Critical Incident theory is utilised for the predetermined coding categories, and descriptions of the categories can be located further down. In addition, this particular technique is essentially favoured among nursing studies (see. Granger, Sandelowski, Tahshjain, Swedberg, & Ekman, 2009; Guo, Sward, Beck, Wong, Staggers, & Frey, 2014; Miller, Reeves, Zwarenstein, Beales, Kenaszchuk, & Conn, 2008).

The transcribed interviews are coded with the predetermined CEA and Critical incident coding scheme and data that cannot be coded are disposed of or not used within the data analysis process. This is in correlation with the data reduction step utilised in Van Kaam's Phenomenological Analysis. With regard to the *Critical Incident Technique*, it should not be seen as a data analysis technique, but rather used for the predetermined code allocation. As such, each critical incident that prevails in the data are coded as "SD" known as Situation

description. This data is reported in the textural table. After the coding process, the researcher proceeds to the next technique known as Van Kaam's Modified Phenomenological Analysis.

1.6.7.2 Van Kaam's Modified Phenomenological Analysis: Van Kaam's Phenomenological Analysis, as modified by Moustakas (1994), is utilised within the study in order to provide a textural, structural, and universal description of the phenomenon. Moustakas (1994) presents the following steps:

1. Listing and Preliminary Grouping:

After the transcription process of the interviews, the next step is to list and group the data into the predetermined CEA and critical incident scheme in an excel sheet. In other words, sentences or words that carry the matching codes is grouped into the representative code category.

2. Reduction and Elimination:

Thereafter, each expression and/or meaning unit is tested against two requirements:

2.1 Does the meaning unit provide a level of understanding with regard to the experience of the phenomenon?

2.2 Is there a possibility of abstracting and labelling it? If yes, abstract and label. If not, eliminate.

In other words, each sentence, word, or meaning unit is tested against this criterion in order for the data to represent the richest information. The researcher is utilising the services of a co-researcher to check and verify the matching coding process. All the vague and repetitive meaning units are discarded to leave only the necessary information. However, all the data is still presented in one excel sheet.

3. Clustering and Thematising the Invariant Constituents:

After all the vague and repetitive meaning units have been discarded, the researcher proceeds to thematise the coding scheme. In other words, all the incidents that portray the same connotation are given a heading, as well as a sub-heading, following their own CEA coding scheme with verbatim quotes.

4. Final identification of the Invariant Constituents and Themes by application:

The researcher utilises the services of the co-researcher again in order for consensus to be reached, especially with regard to the main and sub-headings given. The next step is to produce textural, structural and universal tables.

5. Using the relevant, validated variant constituents and constructing an individual textural description:

After the category table has been verified by a co-researcher, the next step is to construct a textural description within a singular table. As such, the researcher constructs a table which includes the "what" nurses' experiences with regard to the phenomenon. This includes the critical incidents only with verbatim quotes, and main and sub-headings.

6. Using the relevant, validated variant constituents and constructing an individual structural description:

Following the textural table construction, the "how" nurses experience the phenomenon, in accordance with the CEA components, is constructed into a structural table. A table is constructed for each component, following the inclusion of the main theme, the sub-theme, verbatim quotes, and feature selected as from Grid-based approach.

7. Construct for each experience a textural-structural description of the meaning and essences, resulting in a eidetic profile of the CEA Phenomenon:

Lastly, a singular table is constructed for the universal description or eidetic profile. This includes the main heading, sub-heading, and all five components and features under each component.

1.6.7.3 GRID-based Componential Emotion Process Analysis: The GRID-based Componential Emotion Process Analysis is used as the finial data analysis technique (Fontaine *et al*., 2013). Within this technique, the predetermined codes within the CEA are used, as well as the features selected for each component which are described in the literature review. In other words, the following codes are assigned in order to provide the structural description: Appraisal (AP), Subjective Feelings (SF), Bodily Sensations (BS), Action Tendencies (AT), and Expressions (FEX for facial; VEX for vocal).

1.6.8 Strategies employed to ensure quality data

Trustworthiness within the study is ensured by the utilisation of Guba's (1981) model for rigour in qualitative research. In order to provide a sufficient platform for the rigour techniques and procedures, Krefting's (1991) model is used to interpret and explain the techniques. The particular reason is accounted for the fact that Krefting (1991) executed various research studies in order to establish the reliability, validity, and unique features of Guba's Model. In addition, several nursing studies have utilised Krefting's (1991) interpretation making it an effective and consistent source to ensure rigour within this study (Feitsma, 2005; Hegenbarth, Rawe, Murray, Arnaert, & Chambers-Evans, 2015; James & Miza, 2015). Guba's model identifies four rigour techniques, namely, *credibility*, *transferability*, *dependability*, and *conformability* which are subsequently described in detail.

Credibility: Credibility can be described as the stratagem to establish the truth within the findings (Krefting, 1991). That is, do the research findings represent accurate, factual, and conscientious descriptions of the participant's experience regarding the phenomenon? The purpose of credibility is to ensure that individuals can relate to the findings without being present in the study (Macnee & McCabe, 2008; McGloin, 2008). As such, four techniques are used to ensure credibility: Prolonged engagement within the field, Reflexivity, Triangulation, and Peer examination.

1. *Prolonged engagement within the field* is a strategy used by the researcher to obtain a trusting relationship which enables the participants to firstly volunteer in taking part in the study, and secondly to foster a mutual, supportive, and open relationship whereby the participants can comprehensively share their experience of the phenomenon (Bitsch, 2005; Krefting, 1991; Lincoln & Guba, 1985). The researcher extends themselves for a sufficient amount of time in the research field before the actual commencement of the interviews by means of the following ways:
    1.1. Obtain permission to enter the field via the key-role players.
    1.2. Organise a meeting with the participants in order to present a proposal as to the purpose, goals, and responsible frameworks of the particular study.
    1.3. After the meeting, allow sufficient time for concerns raised or questions asked.
    1.4. Provide participants with consent forms and allow the necessary time to reflect on the process and content in order to make a voluntary choice.

1.5. Upon acceptance of the voluntary process, meet with participants to enable a personal face-to-face encounter as a manner to build trust and ensure transparency.
1.6. Confirm appointment prior to interviews.
1.7. Engage the participants in a meaningful, understandable, and supportive manner, which will enable them to comprehensively describe their experience.
1.8. Follow up with participants that requires psychological help.

2. *Reflexivity* is seen as the process whereby the researcher consistently and continuously reflects on his/her interpretations, values, and pre-determined ideas and opinions regarding the phenomenon as this may influence the study (Corbin & Strauss, 2008; Krefting, 1991; Pilnick & Swift, 2011). Influential factors can be accounted for the prolonged engagement within the field, especially the building of trust. However, trust is required in a research study, especially when sensitive topics are on the table. Yet the researcher should not be influenced by the data or influence the participants for the provision of certain data (Grant, 2014). Reflexivity is essentially important as it may limit the researcher to successfully analyse, interpret, describe, and report the research findings (Agar, 1986). Reflexivity is achieved by keeping a reflective journal which includes any or every thought, feeling, idea, and opinion regarding the phenomenon and to discuss the prevalent issues and/or concerns with a subject-related expert (Dowling, 2006; Tuckett, 2005). As a result, researcher bias is addressed and excluded and the researcher is able to commence with the subsequent interviews with a clear mind (Blythe, Wilkes, Jackson, & Halcomb, 2013).

3. *Triangulation* is concerned with the utilisation of numerous methodological data collection techniques and/or strategies, resulting in the comprehensive exploration and description of the phenomenon under study (Krefting, 1991; Lincoln & Guba, 1985). Two triangulation techniques can be applied to obtain evidence for the truth findings, namely: 1) Methodological triangulation and 2) Investigator triangulation (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014). *Methodological triangulation* can be described as the utilisation of various methods to collect data concerning the phenomenon (Barusch, Gringeri, & George, 2011; Creswell & Plano Clark, 2006; Denzin, 1989; Polit & Beck, 2012). As such, the researcher uses in-depth interviews, participant observations (both verbal and non-verbal), field notes, and pilot studies to obtain data. In addition, several theories (also known as theory triangulation) are also used as the basis for data collection, such as the Critical Incident Technique (Flanagan, 1954), The Componential Emotion

Approach, and The Grid-Instrument (Fontaine *et al*., 2013). *Investigator triangulation*, on the other hand, refers to the employment of expert researchers (independent of the subject-related experts) as a means to verify and validate the research study's data collection (including the use of interview-experts to observe the researcher interview skills), analysis, interpretation, and reporting tactics (Carter *et al*., 2014; Patton, 2002; Tuckett, 2005). As a result, the researcher is able to obtain consensus and depth with regard to the study.

4. *Peer examination* is differentiated from investigator triangulation in the sense that a peer examination is seen as subject-related expert, whereas the investigator can be anyone in the qualitative research field (Anney, 2014; Krefting, 1991; Tuckett, 2005). The subject-related research experts also validate and examine the research methodological stratagem, but provide guidance, from their subject framework, on ways to enhance the research's quality of writing and content. The purpose of utilising a peer examiner is to ensure consensus with regard to the research findings and discussions, and to clarify changes or differentiations (Guba, 1981; Krefting, 1991; Lincoln & Guba, 1985). As such, the researcher is using three to four subject-related experts in order to provide them with guidance, structure, and insight.

Transferability: *Also known as applicability*, can be seen as the degree to which the findings of the research can be conveyed to other contexts without losing the essence of the study (Bitsch, 2005; Houghton, Casey, Shaw, & Murphy, 2013; McGloin, 2008). In other words, the study can be replicated on another context and the results confirm a general consensus regarding the findings. It is of the utmost essence to provide sufficient information regarding the methodological research process so as to enable another researcher to replicate the study and obtain transferable results. Transferability is maintained by means of two techniques: Thick Description and Purposive Sampling.

1. *Provision of a thick description* involves the elucidation of the all-inclusive operational steps within the research, starting from the project planning, going to data collection, data analysis, findings reporting, and finally, representing the results (Houghton *et al*., 2013; Krefting, 1991; Tuckett, 2005). As such, the researcher thoroughly describes the operational processes in the method section and due care is taken to sufficiently provide all the information required.

2. *Theoretical/Purposive Sampling* is a technique whereby a specific target population is selected due to the capability of explicating a thorough comprehension of the phenomenon under study (Krefting, 1991; Teddlie & Yu, 2007; Tuckett, 2005). In other words, participants are chosen based on a pre-determined criterion, which would enable another researcher to replicate the study as the sample description is evident.

Dependability: Dependability, *also known as consistency*, can be associated with the consistency or uniformity of the findings over comparable conditions (Bitsch, 2005; Krefting, 1991). That is to say, replication processes should report comparable findings as equivalent methodological processes are used (Houghton *et al*., 2006). The researcher maintains dependability by means of three strategies: Audit Trail, Stepwise Replication, and Code-recode Strategy.

1. *Audit trail:* An audit trial incorporates the systematic and thorough stages pertaining to the planning and execution of the research study (Anney, 2014; Bowen, 2009; Houghton *et al*., 2013). In addition, documented accounts are prevalent throughout the study in order to corroborate and authenticate the findings (Schwandt, 2001). As such, an all-encompassing step-by-step process is evident in the method segment, which introduces the comprehensive audit trail. This audit trail includes the raw data, process notes, interview schedules, etc. As a result, one can ascertain that the findings are the product of a well-executed research study, following several quality check points to validate the findings (Lincoln & Guba, 1985).

2. *Stepwise replication*: Stepwise replication is seen as the technique to utilise two or more independent researchers that serve the function of data coders, data analyst, and data interpreter (Anney, 2014; Guba, 1981; Guba & Lincoln, 1985). The role of the independent researchers is to code, analyse and interpret the data, separately, and to provide their insight and understanding regarding the findings. Following their own process, the researcher and co-researchers organise a meeting to discuss the discrepancies and the subsequent process. Any inconsistencies are addressed and after consensus is reached, the meeting is concluded.

3. *Code-recode strategy*: Co-recode exhibits the process of re-coding (twofold) the data, allowing for an adequate amount of time to lapse before commencing with the second coding phase (Anney, 2014; Krefting, 1991). The researcher codes the data and

consequently sends the data to the co-researcher to validate the codings. After a week or two has elapse, the data is coded for a second time, followed by the utilisation of the co-researcher to validate the findings. Any inconsistencies regarding the data are addressed.

Conformability*:* Conformability, *neutrality in other words*, considers to which the research findings are the product of the participant's experiences considers to which the research findings are the product of the participant's experiences and voices, and not the researcher's influential nature attributed to researcher bias. In other words, the findings are solely based on the data the participants reported on and not on the pre-determined ideas of the researcher (Krefting, 1991; McGloin, 2008; Polit & Beck, 2012). The researcher ensures to explicitly document the all-encompassing operational planning and executing processes in order to validate the objectivity and significance of the research study. This is achieved by the establishment of an audit trail (Bowen, 2009; Houghton *et al*., 2013; Krefting, 1991; Ryan-Nicholls & Will, 2009). Per se, the researcher maintains an audit trail, which is exhibited by the procedural measures of this research. The audit trial encompasses all the steps related to the comprehensive project setup.

1.6.9 Ethical Considerations

Regarding the code of ethics, the following ethical aspects that were considered (de Vos *et al*., 2011): 1) ensuring that the researcher remains honest and show respect towards the participants; 2) ensuring that the researcher is qualified and competent to conduct the research study; 3) ensuring that the researcher maintain integrity and fairness; 4) ensuring that the researcher conducts himself/herself in a professional manner by accepting responsibility for his/her actions; 5) ensuring that the researcher take into consideration the rights and dignity of the participants; and 6) ensuring that the researcher does not bring about harm to the participants, but to ensure the welfare of the participants. Ethical aspects regarding the participants were also considered and included the following:

1.6.9.1 Avoidance of harm: The researcher will take beneficence into consideration. By no means, whatsoever, will the researcher perform actions that will possible harm the participants in a physical or emotional manner. To avoid any harm, the researcher will thoroughly inform the participants of the possible dangers involved and allow them to withdraw at any stage in the case if they feel exposed or unsure. For psychological ethical purposes, the researcher will

have contact details of a psychologist should the need arise to refer in any situation (de Vos *et al*., 2011).

1.6.9.2 Informed consent: According to Grinnell and Unrau (2008) it is of the essence to provide the participants with the opportunity to either take part in the study or wilfully decline. Therefore, the researcher will place emphasis on informing the participants of the goals of the study, the duration of the study, the possible advantages and disadvantages, the procedure to be followed, the dangers that they will be exposed to, and the credibility of the researcher. A written consent form will be provided to the participants with all the requirements stipulated (discussed below). Lastly, the completed consent forms will be stored in a safe and secure location where only the researcher has access to.

1.6.9.3 Voluntary participation: No participant will be forced to participate in the study and therefore all the participants will be given the opportunity to participate voluntary. The participants, as indicated above, will have all the necessary information to make an informed decision as to whether to participate.

1.6.9.4 Violation of privacy and confidentiality: According to de Vos *et al*. (2011) every participant has the right to withhold information that might possible place them in an embarrassing or exposing situation. They may not be forced to share information that they feel uncomfortable with. Therefore, to ensure the participants of their privacy, the researcher will emphasise that their identity will be kept anonymous as well as give them the choice that they may withdraw when the process develops into a personal struggle for them. Together with this, confidentiality will be, at all times, maintained to the highest level. Their information will be handled by the researcher only and kept in a secure location. No information will be disclosed without their permission.

1.6.9.5 Deception: Deception, according to Struwig and Stead (2001), refers to the deliberate process of misinforming, misleading, or withholding information from participants. Therefore, to avoid deception the researcher will declare all the information that the participants require to make an informed decision. The researcher, furthermore, will clearly indicate all the instructions to the participants and will not mislead them I the research. As stipulated above, they will be made fully aware of the purpose of the study, the use of digital voice recorder, and that field notes will be made.

1.6.10 Reporting

The findings of this study are reported in a qualitative writing style. This style allows for an accurate description of the participant's experience. de Vos *et al*. (2011) and Leedy and Ormrod (2005) mention that a qualitative report is less structured in the sense that it is, by nature, more flexible and open and evolves over the course of the study; more intertwined with the research process in the sense that it does not consist of a single step but the researcher should continue to write throughout the study; and often longer and more descriptive in the sense that it takes time to describe and write. Nonetheless, Creswell (2007) and Neuman and Kreuger (2003) point out that this process, in essence, comprises its own uniqueness such as:

- Qualitative data is considered to be more rich data since it integrates the voice of the participants in the report.
- Qualitative research can ultimately give way to more perspectives, which assist the reader in gaining a feeling of the participant's experience, as they subliminally place the reader into the world of the participant.
- The narrative writing style increases the report as it brings personal, familiar and friendly information into the report.
- The exploratory nature gives way for new theories and phenomena to evolve or come forth.

The key purpose of a qualitative dissertation is to accurately reflect the participants' opinions and perspectives and consequently to transfer this knowledge gained from the participants to a meaningful article (de Vos *et al*., 2011).

1.7 Chapter division

The chapters in this mini-dissertation are presented as follows:

Chapter 1: Introduction.
Chapter 2: Research article.
Chapter 3: Conclusions, limitations, and recommendations.

1.8 Chapter summary

Chapter 1, in summary, focuses its attention on the substantial research gap with regard to the use of the componential emotion approach within the nursing environment in South Africa, as suggested by Scherer and colleagues (Fontaine *et al*., 2013; Fontaine *et al*., 2007; Prinz, 2004; Scherer, 1987; 2001; 2005). Within this chapter, the componential emotion approach is introduced and explained to the reader, and emphasis is placed on why it is important to utilise this technique within the nursing environment. Furthermore, emphasis is also placed on the need for the utilisation of the specific research design and method as beneficial to this type of research.

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CHAPTER 2

RESEARCH ARTICLE

Exploring the situation-specific emotional episodes among nurses: Application of the componential emotion approach

Orientation: Emotions are characterised by numerous synchronised substrates and can also be used to make significant inferences regarding human behaviour and motivation.

Research purpose: The objective of this study is to investigate the situation-specific emotional episodes that nurses experience within their working environment and to apply the componential emotion approach in order to ascertain a feature profile for the South African context.

Motivation for the study: Nurses are continuously confronted with both positive and negative situations which evokes certain emotions within them. However, nurses do not only express their emotions only in words (e.g., anger, sad, happy), but also in terms of five synchronised emotion components (e.g., appraisals, subjective feelings, motor expressions, physiological occurrences, and action tendencies). However, these five components has not yet been studied as a dynamic unit within South Africa. As such, the researcher aimed to present an eidetic profile for the experience of emotions among nurses.

Research approach, design, and method: A qualitative research design from a phenomenological paradigm was employed. In addition, the transcendental (descriptive) phenomenological approach was used. A purposeful sampling technique was used as it best served the purpose of the study. The sample consisted of nurses who are registered at the Unit of Open Distance Learning, Potchefstroom Campus (n = 9). In-depth interviews were used as a means to collect data, followed by four distinct data analysis techniques, namely, Critical Incident Technique, Directed Content Analysis, Van Kaam's Modified Phenomenological Analysis, and the GRID-based Componential Emotion Process Analysis.

Main findings: The results pertaining to this study indicated that nurses were able to report on all five components of the componential emotion approach; therefore, a descriptive eidetic emotion feature profile could be extracted for the nurses within South Africa. As a result, one can make significant inferences regarding their motivational behavioural responses within the nursing profession. However, further exploration is required regarding the reasons nurses report on these motivational behavioural patterns and the meaning thereof.

Practical implications/managerial implications: As nurses can be made aware of these motivational behaviour response patterns, irrespective if it is deemed as favourable or not,

interventions can be constructed in order to aid them in their emotional management, which, in turn, can lead to better organisational outcomes.

Contribution/value-add: Within an international context, the CEA has extensively been explored; however, the CEA has not yet been researched as a synchronised scheme in South Africa among nurses. By conducting this study, the CEA can further be extended in a qualitative manner. The study may elicit further exploration regarding emotions among nurses, especially in terms of the meaning nurses attach to the experience of emotions.

***Keywords*:** Componential emotion approach (CEA), emotions, emotion theories, nurses, South Africa, critical incidents, positive experiences, negative experiences.

Introduction

Of recent, the South African health care sector has become a focal matter in several discussions (WHO, 2014). These discussions has focused on continual *social* (e.g., poverty, access to health care; access to sanitary water) (Day *et al*., 2014; Louwagie, Wouters, & Ayo-Yusuf, 2014) and *economic* (e.g., affordable health care; capital distribution to private versus public sector; funding mismanagement; preventative health care initiatives; growth, employment, and redistribution strategies) challenges which the sector faces (Annandale, 2010). Furthermore, various *health disparities and inequalities*; and *insufficient job resources* (e.g., hospital beds, sufficient medicines) (Annandale, 2010; Cunningham & Sammut, 2012; Eagar, Cooke, Levin, & Wolmarans, 2015) affects the manner in which quality health care is provided. These challenges are not only detrimental for the country, however have an effect on the professional individual, particularly the nurse, which provides the services.

Nurses are continuously confronted with conditions which are both negative (e.g., deaths, occupational hazardous incidents, and staff shortages) and positive (e.g., helping others, receiving good feedback from patients, and witnessing miracles) (Klopper, Coetzee, Pretorius, & Bester, 2012; McQueen, 2004). Such conditions evoke certain emotions which are either voluntarily or involuntarily (Hunter & Smith, 2007). That is, although they are exposed to positive incidents which evoke such positive emotions, they are equally exposed to negative events which induce undesirable emotions, in turn, impedes their ability to provide quality care contributing to their destructive response patterns. Emotions can insinuate various inferences about the complex sub-conscious processes occurring in the human mind which, ultimately, leads to innumerable human behavioural characteristics and response actions (Buck, 1985; Izard, 1977; Ortony *et al*., 1990; Scherer, 2005), As such, the study of emotions among nurses serves a great need in either enhancing the positive responses, rectifying the negative ones or describing the emotion process as a means to understand behaviour; thus the purpose, objective, and necessity of this study

Research purpose and objectives

The general objective of this research was to explore the situation-specific emotional episodes experienced among nurses in accordance with the componential emotion approach. The specific objectives of this study were:

- To conceptualise the componential emotion approach according to the literature.
- To explore the situation-specific emotional episodes among nurses.
- To determine how the appraisal component of the CEA is experienced among nurses within different situation-specific emotional episodes.
- To determine how the subjective feeling component of the CEA is experienced among nurses within different situation-specific emotional episodes.
- To determine how the action tendency component of the CEA is experienced among nurses within different situation-specific emotional episodes.
- To determine how the motor expression component of the CEA is experienced among nurses within different situation-specific emotional episodes.
- To determine how the physiological changes component of the CEA is experienced among nurses within different situation-specific emotional episodes.
- To make recommendations for future research and practice.

Literature Review

The nursing profession

A professional nurse is described as a person who attained an eligible qualification and equipped themselves with the necessary skills and competencies (National Qualifications Framework Act 67 of 2008; Skills Development Act 97 of 1998, see. South Africa, 2008; 1998; SANC, 2015). Accordingly, these skills enables them to practise independently, to the level prescribed, and to assume responsibility and accountability for such a care giving practise (National Health Act 61 of 2003; Nursing Act 33 of 2005, see. South Africa. 2003; 2005; SANC, 2015). As a result, they also undertake numerous responsibilities, which include, but not limited to, precise patient health need diagnosing; administration of medical treatments and/or medications, and care; monitoring of patient's vital signs and reaction to treatment and medication interventions; prevention and treatment of injuries, accidents, infections, and diseases; counselling in the form of promoting, maintaining, and prevention with regards to healthy and hygienic lifestyles, exercise, nutritional plans, rehabilitation initiatives, and injuries; explicit care for the seriously ill, disturbed, confused, aged, infant, and disabled; and continuous supervision and follow-up during care giving to ensure patient contentment (see. Russell, 2012; HPCSA, 2008b; SANC, 2015 for an in-depth list). Nonetheless, a responsible

framework as such can induce copious experiences or circumstances that are either deemed as positive (i.e. meaningful) or negative (i.e., demanding).

Positive experiences

Nurses attach a sense of meaning when contributing to their profession. Meaning at work can be defined as the value and significance the employee attaches to the work they do (Moerdyk *et al*., 2015; Steger, Dik, & Duffy, 2012). For nurses, meaning is expressed by gratification as one assume a caregiving role, where they not only impact the patient's life in a profound manner, but also experience conditions that are remarkable and life-changing (Burnett, 2015; Nash & Fitzpatrick, 2015).

As such, nurses adopt an attitude of holistic care giving in which they concentrate on the patient's physical, emotional, psychological, and spiritual needs and deficiencies (Nash & Fitzpatrick, 2015; Stayt, 2009). Consequently, a meaningful nurse-patient relationship develops due to the nurses feeling a sense of connectedness and care towards their patients (Belcher & Jones, 2009; Porter, Cortese, Zezina, & Fitzpatrick, 2014). To them, care giving is not seen as a business transaction, but rather a deeper meaningful calling (Van Zyl, Deacon, & Rothmann, 2010). The concept of "a calling" represents the notion of serving a higher purpose and executing the care giving responsibilities to the best of the nurses' ability (Beukes & Botha, 2013; Dik & Duffy, 2009; Van Zyl *et al*., 2010), indicative of a feeling of being "born" for this particular profession, despite the monetary/non-monetary rewards of it (Beukes & Botha, 2013). As such, viewing what they do as a calling contributes to higher psychological and spiritual functioning (Lips-Wiersma & Morris, 2011), wellbeing (Arnold, Turner, Barling, Kelloway, & Mckee, 2007), having a purpose in life (Lips-Wiersma & Morris, 2011), and being able to truly care for their patients (Donoso, Demerouti, Hernández, Moreno-Jiménez, & Cobo, 2015; Newton, Kelly, Kremser, Jolly & Billett, 2009).

Additionally, knowing that they are impacting their patient's lives in a profound manner induces several organisational outcomes such as: organisational commitment, work engagement, organisational citizenship behaviour, and job satisfaction. *Organisational commitment* can be defined as "the emotional attachment to, identification with, and involvement in the organisation" (Meyer & Allen, 1991, p. 67). *Work engagement*, on the other hand, can be defined as "the positive, fulfilling, work-related state of mind that is characterised

by vigour, dedication, and absorption" (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002). A positive relationship was reported between viewing work as a calling with organisational commitment and work engagement (Beukes & Botha, 2013; Laschinger, Wilk, Cho, & Greco, 2009; Mathumbu & Dodd, 2013). Other studies have further been conducted investigating organisational citizenship behaviour with nurses (Mathumbu & Dodd, 2013). As such, *Organisational citizenship behaviour* (OCB) can be described as the willingness of an employee to extent themselves above and beyond the formal call of duty for the wellbeing of the organisation (Ahmed, Rasheed, & Jehanzeb, 2012; Tepper, Lockhart, & Hoobler, 2001). OCB has been linked with organisational commitment in the sense that due to employees feeling an emotional attachment towards the organisation, they reciprocate performance beyond the formal expected job/role requirements (Duarte, 2015). In addition, they also express attributes of professional commitment as a result, such as helping and guiding their colleagues, complying with hospital procedural guidelines, and displaying of high levels of integrity and respect (Duarte, 2015; Teng, Lee, Chu, Chang, & Liu, 2012). As a result of high levels of organisational citizenship behaviour, higher levels of job satisfaction might become apparent.

Job satisfaction has extensively been researched among nurses (see. Delobelle *et al*., 2011; Hayes, 2015; Laschinger, 2012). The particular reason being that if employees are satisfied within their job, they are more likely to be committed towards the organisation (Lu, Barriball, Zhang, & While, 2012; Wu & Norman, 2005), more engaged (Yakin & Erdil, 2012), and willing to walk the extra mile for the organisation's wellbeing (Radebe & Dhurup, 2014). Job satisfaction, on the other hand, can be described as the favourable attitude and positive feelings the employee has towards the job (Lu *et al*., 2012). Not only is the focus on the affective component of the job, but also includes the employee's perception of what they assume the job should provide for them (Lu *et al*., 2012). As such, a study conducted by Blaauw and colleagues (2013) indicated a discrepancy between the expected conditions of the job and the actual conditions leading to South Africa with the lowest job satisfaction levels compared to other countries such as Malawi and Tanzania. However, despite these low levels of job satisfaction, nurses still report a form of job satisfaction. As a result, they are able and willing to care for their patients.

Caring, as an all-encompassing concept, not only revolves around giving oneself in a physical, practical manner, but also in an emotional, spiritual manner (Kaur, Sambasivan, & Kumar, 2013; Ronaldson, Hayes, Aggar, Green, & Carey, 2012). Therefore, virtues such as empathy

and compassion endorses the altruistic qualities of the nursing environment (Newton *et al*., 2009). Virtues, within the nursing environment, is especially important due to the fact that it contributes to nurse completeness and character development as they embrace and tend to patients, which are essentially strangers to them, as to their own families (Compton, 2005; Nash & Fitzpatrick, 2015). Empathy can be described as being aware, sensitive to, and understanding of the feelings of others, but also to share someone else's feelings (Cunico, Sartori, Marognolli, & Meneghini, 2012; Merriam-Webster, 2015). In the case of nurses, empathy is seen as a cognitive-emotional process whereby the nurses place themselves in the shoes of the patients in order to comprehend their needs and sufferings (Cunico *et al*., 2012; Lelorain, Brédart, Dolbeault, & Sultan, 2012). They, ultimately, acknowledge the patient as someone who is enduring immense emotional and physical pain and intent to comfort the patient by responding in a warm, caring manner (Lelorain *et al*., 2012).

Furthermore, the nurses' ultimate goal is to create an atmosphere that is conducive to full acceptance, especially during the patient's most embarrassing situations (Peterson *et al*., 2010); to improve the patient's psychological, emotional, and physical comfort by ensuring their needs are constantly met (Peterson *et al*., 2010); to take personal responsibility in not only caring for the patient, but also attending to the family's needs (Coetzee & Klopper, 2010; Peterson *et al*., 2010; Wilken & Slevin, 2004); and to transfer communication in a supportive, encouraging, and empowering manner (Koontz, Mallory, Burns, & Chapman, 2010; Slatore *et al*., 2012). In addition, nurses utilise different strategies in order to encourage empathy, such as: sensitively responding to the patients by means of touch (Bramley & Matiti, 2014; Slatore *et al*., 2012), encouraging the patients to bring valued observable items as a soothing method (e.g., photos) (Olausson *et al*., 2014), and sitting next to the patient's bed, showing a willing heart to listen (Parvan *et al*., 2014). In addition, compassion is a concept used interchangeably with empathy, though, it encompasses its own functions (Schantz, 2007).

Compassion is regarded as a vital element in care giving as it relates to human interaction and dictates the restoration of patient care and emphasise feelings of connectedness and meaning (Cingel, 2011; Gustin & Wagner, 2013). Compassion can be described as "a feeling of deep sympathy and sorrow for another who is stricken by misfortune, accompanied by a strong desire to alleviate the suffering" (Dictionary.com, 2015). Compassion differs from empathy and related terms in the sense that it empowers and encourages the alleviation of suffering, apart from acknowledging it (Koontz *et al*., 2010; Schantz, 2007). Schantz (2007) indicated

the importance of compassion within nursing as representing a motivational attitude in doing good and allowing oneself to remove any differential barriers between nurse and patient that may prohibit care giving (Cingel, 2011). As such, studies claim that nurses particularly enter into the nursing profession as they are able to help other people and reduce physical, emotional, and psychological pain (Baughan & Smith, 2008; Cingel, 2011; Eley, Eley, & Rogers-Clark, 2010).

Negative experiences

Even though nurses care for and contribute to the patients (as indicated above), they are confronted with and exposed to immense demands that induces a negative experience towards the nursing profession (Rothmann *et al*., 2006). The following factors have been reported to contribute to the experience of a negative environment: long working hours with insufficient resting periods (Córdova *et al*., 2013; Powell, 2013; Unrah & Nooney, 2011); high workloads (French, Du Plessis, & Scrooby, 2011; Tuckett *et al*., 2009; Van Der Heijden, Demerouti, Bakker, & Hasselhorn, 2008); shortage of qualified nursing personnel (Atefi, Abdullah, Wong, & Mazlom, 2014; Gustafsson, Fagerberg, & Asp, 2010; Hart & Warren, 2013); overcrowded hospitals and limited hospital beds (Atefi *et al*., 2014; Unrah & Nooney, 2011); insufficient medical supplies and physical resources (Córdova *et al*., 2013); low remuneration (Atefi *et al*., 2014; Bogossian, Winters-Chang, & Tuckett, 2014; Tuckett *et al*., 2009); collective bargaining disagreements (Hart & Warren, 2013); and workplace bullying (Cooper & Curzio, 2012; Edwards & O'Connell, 2007; Yun, Kang, Lee, & Yi, 2014).

Furthermore, nurses are also challenged with factors such as: consistent interactions in an occupational hazardous environment (Rothmann *et al*., 2006); insufficient growth and development opportunities (Atefi *et al*., 2014; Nayeri, Salehi, & Noghabi, 2011; Powell, 2013); poor organisational infrastructure (Córdova *et al*., 2013; Gustafsson *et al*., 2010); demanding, unsupportive working relationships (Gustafsson *et al*., 2010; Powell, 2013); insufficient organisational support (Atefi *et al*., 2014; Nayeri *et al*., 2011; Powell, 2013; Tuckett *et al*., 2009); communication barriers (Gustafsson *et al*., 2010); work-life balance challenges (Mullen, Gillen, Koolsa, & Blanc, 2015); ethical dilemmas (Gustafsson *et al*., 2010; Tuckett *et al*., 2009); and discrimination (Atefi *et al*., 2014; Kouta & Kaite, 2011; Kydd & Fleming, 2015). Related to these negative factors are the typical critical incidents that nurses are exposed to on a daily basis, which impedes their ability to provide quality care.

A critical incident can be described as an unexpected event or situation that includes actual, threatened, witnessed or perceived death, serious injury, or threat to the physical or psychological health and safety of an individual (Diagnostic and Statistical Manual of Mental Disorders, DSM, 2013). As such, several studies reported the following critical incidents among nurses, impeding on their physical, emotional, and psychological functioning: needle prick injuries (Mothiba, Lebese, & Maputle, 2012; Ziady, 2008); exposure to HIV/AIDS infected patients (Hartley, 2005); emotional involvement with dying patients (de Boer, van Rikxoort, Bakker, & Smit, 2013); intimidation by the patients and their respective family members (de Boer *et al*., 2013; McKenna, Poole, Smith, Coverdale, & Gale, 2003); witnessing of tragic events such as a child dying (Mealer, Shelton, Berg, Rothbaum, & Moss, 2007; Ørner, 2003); providing care without sufficient protective gear and getting injured (Ncama & Uys, 2003; Ziady, 2008); violence from patients (Jackson, Hutchinson, Luck, & Wilkes, 2013; Roche, Diers, Duffield, & Catling-Paull, 2010; Winship, 2014); verbal and non-verbal threats and critique (Jackson *et al*., 2013; Roche *et al*., 2010); physical and vocal sexual harassment (Jackson *et al*., 2013; Speroni *et al*., 2014); disrespect and humiliation from patients (Speroni *et al*., 2014; Winship, 2014); and unsuitable racial remarks (Mapedzahama, Rudge, West, & Perron, 2012; Stone & Ajayi, 2013). Due to the combination of these demands and the negative incidents, nurses are lead to experience high levels of stress, burnout, compassion fatigue, and emotional labour (Hart & Warren, 2013; Sumner & Townsend-Rocchiccioli, 2003).

Stress can be defined as "a physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation" (Merriam-Webster, 2015). The concept of stress originated from the Latin word "stringere", meaning "*to draw tight*". For nurses, experiencing stress is a key attribute to the profession due to the responsibility of providing quality care to patients, being exposed to several demands, staff shortages, and additionally, they need to achieve their key performance indicators (Anyebe, Garba, Ukut, & Lawal, 2014; Donnelly, 2014; Williams, 2002). Stress is commonly seen as both a somatic and psychosomatic reaction to a situation due to a negative cognitive representative appraisal (Anyebe *et al*., 2014). In other words, the archetypal demands and stressors mentioned above creates a negative, undesirable appraisal resulting in physical and psychological reactions.

On the other hand, burnout has been defined as a syndrome consisting of "a persistent, negative, work-related state of mind in 'normal individuals' that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and

the development of dysfunctional attitudes and behaviours at work" (Maslach & Jackson, 1986, p. 36). Burnout is known to comprise of three components, namely: exhaustion, depersonalisation, and reduced personal accomplishments (Maslach & Jackson, 1986; Maslach & Leiter, 1998). *Exhaustion* can be characterised as a lack of mental and emotional energy which occurs in employees; making them unable to deal with their current working responsibilities. It is typically equated with symptoms such as reduced energy, feeling restless, and unable to concentrate and focus on the task at hand (Weiss, 1983). *Depersonalisation* (also known as cynicism), on the other hand, refers to a cynical, negative attitude that may result in unsympathetic and uncaring behaviours or distancing oneself from others (Maslach, 1998). Lastly, *reduced personal accomplishment*s signifies self-efficacy disbelief. In other words, the employee has a reduced sense of competence and productivity at work (Maslach, 1998).

Accordingly, nurses have been reported to experience high levels of burnout (see. Adwan, 2014; Hu, Luk, & Smith, 2015; Jesse, Abouljoud, & Hogan, 2015; Qu & Wang, 2015). The consequences of burnout on nurses is detrimental as not only does it affect their psychological capacity to provide quality care, but also their physical capacity. Such consequences are reported to consist of: poor performance (Miller, 2011); compromise on patient safety due to exhaustion and cynicism (Poghosyan, Clarke, Finlayson, & Aiken, 2010; Van Bogaert, Meulemans, Clarke, Vermeyen, & Van de Heyning, 2009); psychological consequences such as anxiety, fear, negative attitude, and depression (Tourigny, Baba, & Wang, 2010); absenteeism (Davey, Cummings, Newburn-Cook, & Lo, 2009); turnover (Shoorideh, Ashktorab, Yaghmaei, & Majd, 2015); physical depleted symptoms such as diabetes, hypertension, and sleep disturbances (Chipas & McKenna, 2011); and compassion fatigue (Hinderer *et al*., 2014).

Compassion fatigue, as firstly introduced and termed by Joinson (1992), signifies the emotional, physiological, psychological, and spiritual exhaustion as a result of the periodic exposure to devastating illnesses, sufferings, and trauma within people (Peery, 2010; Sacco, Ciurzynski, Harvey, & Ingersoll, 2015). As such, one knows that the nursing profession is equated with traumatic incidents, as mentioned above, therefore making the concept of compassion fatigue immensely evident among nurses (Coetzee & Klopper, 2010; Boyle, 2011). The most eminent concern of compassion fatigue individuals, from a caring perspective, manifest itself in the inability to provide further care or nurture to the individuals in need

(Bride, Radey, & Figley, 2007; Sabo, 2011; Stamm, 2010; Wisniewski, 2011) and averting feelings of anger and frustration as a defence mechanism (Aycock & Boyle, 2009; Coetzee & Klopper, 2010; Figley, 1995; Yoder, 2010).

Nurses can experience compassion fatigue in an instance, while concepts such as burnout, which is known to be linked with compassion fatigue, evolves over time (Hinderer *et al*., 2014; Hunsaker, Chen, Maughan, & Heaston, 2015; Portnoy, 2011; Sacco *et al*., 2015). However, compassion fatigue is the cumulative result of emotional and physical exhaustion and cynicism, which is a sub component of burnout (Boyle, 2011; Hunsaker *et al*., 2015). Several studies has reported detrimental consequences for the nurses who are faced with compassion fatigue, such as: sleep disorders, nightmares, and invasive images of trauma individuals (Coetzee & Klopper, 2010; Hooper, Craig, Janvrin, Wetsel, & Reimels, 2010; Showalter, 2010); feelings of sadness, anxiety, depression, anger, cynicism, and apathy (Boyle, 2011; Bride *et al*., 2007; Coetzee & Klopper, 2010; Hegney *et al*., 2014; Sabo, 2011); caring giving errors such as needle prick injuries or medicinal distribution errors and patient health judgement errors, such as wrongfully diagnosing the patient (Badger, 2001; Boyle, 2011); and organisational outcomes such as decreased productivity, turnover intention, and absenteeism (Burtson & Stichler, 2010; Jones & Gates, 2007; Meadors & Lamson, 2008; Portnoy, 2011).

In relation to compassion fatigue, emotional labour is a concept that has also made its way to the nursing profession. Emotional labour can be defined as "the induction or suppression of feelings in order to sustain the outward countenance that produces the proper state of mind in others of being cared for in a convivial safe place" (Hochschild, 1983, p. 7). As patients go through traumatic events, they continuously express their emotions in either a positive or negative manner. Especially for nurses, they have to deal not only with the patients' negative emotions, but also their own as a result of the immense demands from the job and the difficult patients. Huynh, Alderson, and Thompson (2008) asserts that nurses, having those emotions and thoughts inwardly, are not able or allowed to express them outwardly. As a result, they have to utilise regulation strategies of surface and deep acting (Diefendorff, Croyle, & Gosserand, 2005). However, as a result of using these acting strategies, nurses cannot truly express their emotions, resulting in a misfit between what they feel and how they express it. This concept is also known as emotional dissonance (Zapf, 2002). Emotional dissonance is a serious threat to the nursing environment due to the fact that it is linked to burnout and also prohibits the nurse to fully engage with their patient as to provide the necessary care. As such,

it is crucial to explore the concept of emotions among nurses as detrimental consequences have been reported regarding emotions within and among nurses.

Emotions and Emotion Theories

The concept of emotion dates back to the year 1887 when William James rhetorically asked the question of what an emotion is. Since then, many scholars have attempted to deconstruct this unique concept, which lead to many debates regarding the definition of emotions (see. Kleinginna & Kleinginna, 1981). That is, claims have been made that emotions are solely bodily changes (James, 1884; 1890; 1894), or changes in motor expressions (Darwin, 1872; Ekman, 1992; Ekman, Sorenson, & Friesen, 1969; Izard, 1991), and lastly, changes in motivational intentions (Frijda, 1987; 2010) (in-depth description follows further down). Frijda and Scherer (2009), as a result, attempted to reiterate the basic assumptions that all scholars agree on regarding emotions. They propose four distinct assumptions that are shared among emotion scholars, namely: (a) humans will elucidate an emotion when it is conducive to a need satisfaction, if it reaches an intrinsic goal, and lastly, if it is congruent with the individuals values (Fontaine *et al*., 2013; Scherer & Ellsworth, 2009); (b) emotions have a motivational force which enables individuals to deal with essential conditions in modern society (Frijda, 1987; 2010); (c) emotions engage the individual, which brings about action-execution or action-imposing, followed by changes in both the neuromusculoskeletal system and/or motor expressions, consequently enabling the individual to adapt to the exigencies of an event (Scherer, 2001, 2005; 2009); and (d) emotions give control priority, in the sense that one may or may not be able to control the behaviour bestowed upon (Frijda, 2010).

However, numerous emotion scholars differ in what they believe the additional assumptions of an emotion are comprised of. As a result, three main theories can be identified to debate the assumptions: (a) *basic emotion theory* (Darwin, 1872; Ekman, 1972; Izard, 1971; 1977; 1992; James, 1884; Lange, 1885; Tomkins, 1962); (b) *cognitive, or appraisal theories* (Arnold, 1960; Frijda, 1986; Lazarus, 1966; Lazarus, Coyne, & Folkman, 1984; Lazarus, Kanner, & Folkman, 1980; Oatley & Johnson-Laird, 1987; Ortony, Clore, & Collins, 1988; Roseman & Smith, 2001; Scherer, 1984; Smith & Ellsworth, 1985); and (c) *dimensional theories* (Davitz, 1969; Plutchik, 1980; Russel, 1980).

Basic Emotion Theory

The *basic emotion theory* was coined by Darwin (1872), pioneering the expression of emotions in humans and animals. Tomkins (1962) and colleagues (Ekman, 1972; Izard, 1992; James, 1884; Lange, 1885) further explored and developed Darwin's theory and postulating that there exists clear, innate categories of emotions, known as discrete emotions. This particular theory proposes seven evolutionary affective programs, known as *happiness*, *surprise*, *contempt*, *sadness*, *fear*, *disgust*, and *anger* (Ekman, 2003). The basic premise of this theory is that these seven emotions are universally experienced among humans and that more than one emotion can be expressed in a singular subjective event. In addition, these seven emotions are accompanied by a set of specified response characteristics, such as expression patterns, physical reaction configurations, and a distinctive subjective experience, feeling (Darwin, 1872; Ekman, 1972). In other words, a certain type of event triggers one or more of the limited discrete emotions, which follows several response patterns. However, they do posit that the response characteristics may differ from person to person (Izard, 1971; 1977; Tomkins, 1962). In addition, focus has more been on facial and vocal expressions as this is the hard-wired appearances of the basic emotion theory (Darwin, 1872; Ekman, Friesen, & Ellsworth, 1972). The basic theory was developed by showing several participants various facial expressions and allowing them to listen to vocal expressions, consequently requesting them to identify the appropriate emotion term. Results pertaining to these studies confirmed above chance levels for different cultures with regards to the recognition of the basic emotions (Ekman & Friesen, 1971; Murray & Arnott, 2008; Scherer, Banse, & Wallbott, 2001). Reference is further made to three important constructs, namely: intensity, context, and blending (Bann, 2012; Fontaine, Poortinga, Setiadi, & Markam, 2002; Izard, 2011; Moors, 2009; Murray & Arnott, 2008). *Intensity* relates itself with the notion of the basic emotion which can produce different intensity levels. For example, when one experiences irritation, low to high levels of anger can be expressed. *Context*, on the other hand, refers to the idea that when experiencing a certain discrete emotion, valuable information can be provided regarding a specific context. For example, experiencing delight can be portrayed as joy in a transcendent background. Lastly, *blending*, posits that a singular event can elicit more than one basic emotion, as previously mentioned.

Cognitive or Appraisal Theory

The *cognitive or appraisal theorists* differs from the basic emotion theorists in the sense that appraisal theorists recognise the existence of discrete categories of emotions, however, they do not explicitly agree on the fixed definition and constrained nature of these emotions and the emotion response process (Arnold, 1960; Frijda, 1986; Lazarus, 1966; Lazarus, Coyne, & Folkman, 1984; Lazarus, Kanner, & Folkman, 1980). The appraisal theory of emotion originated from a philosophical tradition (e.g., Aristotle, 1954; Descartes, 1649; 1989; Spinoza, 1677; 1989). They add to the basic emotion theory by postulating that these discrete emotions are differentiated due to a cognitive evaluation or judgment of a certain event (Fontaine *et al*., 2013). In other words, cognition is the antecedent of the discrete emotion, which firstly followed an unconscious or otherwise involuntary course (Arnold, 1960; Scherer, 2001; 2004).

The basic notion of this theory regards the cognitive aspect as the forerunner of the emotional episode, subsequent the stimulus and prior to the physiological response patterns (Moors, 2009). In other words, individuals confronted with various stimulus and the cognitive aspect will determine which stimuli will lead to an emotion and also which emotion will be produced (Roseman & Smith, 2001). The appraisal theory also acknowledges the intensity of an emotion as with basic emotion theory. It attempts to discover the commonalities and discords between the stimuli that evokes a certain emotion and those that do not (Moors, 2009). As such, two main appraisal variables are proposed to explore this predicament, namely goal relevance and goal congruence (Fontaine *et al*., 2013; Uphill & Jones, 2007). With regards to *goal relevance*, the stimuli will only produce an emotion if it results in outcomes relevant to the individual's goals (Oatley & Johnson-Laird, 1987; Scherer, 2005). For example, if physical safety is important for the individual, the individual will produce an emotion if an attacker or robber is attempting to break into the individual's house. Conversely, *goal congruence* relates itself to the idea that an emotion is evoked due to a specific constellation class of stimulus and goals. In other words, an emotion is evoked if it obstructs any goal (Silvia & Brown, 2007). In concluding remarks, the appraisal theory of emotion is known for its unconscious appraisal of a stimuli which took place prior to the emotion. This appraisal of the stimuli causes a certain action tendency (Frijda, 1986), which manifests itself in a physiological response, which, in turn, prepares the individual for the occurrence of the behaviour.

Dimensional Theory

Dimensional theorists, on the other hand, differs from basic and appraisal theorists in the sense that they argue that an emotion should be conceptualised as comprising of typical two to three underlying dimensions (Davitz, 1969; Mehrabian & Russell, 1974; Plutchik, 1980; Russell, 1980; 2003). For example, Wundt (1905) proposed that an emotion consist of three dimensions known as *valence,* which refers to whether an emotion is pleasant of unpleasant (e.g., sad vs happy) (Barrett, 2006; Watson & Tellegen, 1985); *arousal*, indicating a high arousal (e.g., nervous) versus low arousal (e.g., calm) component of emotion (Adolphs, James, Russell, & Tranel, 1999; Russell, 1980); and *tension*, which denotes tensed or relaxed emotions (Thayer, 1989; 1996; Thayer, Newman, & McClain, 1994). Surprisingly, even though the dimensional theorists proposes a theoretical underpinning for emotions, they prefer to emphasize concepts such as feelings, mood, or affect, instead of emotions (Marsella & Gratch, 2009; Russell, 2003). As such, they posit to describe an emotion (neé affect) as a mental state involving evaluative feelings. For example, this person feels good or bad, after appraising the current event (Barrett & Russell, 1999; Gray & Watson, 2007; Russell & Barrett, 1999).

Componential Emotion Approach (CEA)

As mentioned previously, various emotion theories exists that attempts to explain the intricate nature and purposeful course of emotions (e.g., cognitive theory, basic emotion theory, and dimensional theory). In accordance to these theories, reference is made to emotions being the product of *physiological occurrences* (e.g., James, 1884; 1894), *motor expressions* (e.g., Darwin, 1872; Ekman, 1972; Ekman & Friesen, 1986; Ekman & Oster, 1979; Scherer, 1986; 1988; 2000), *subjective feelings* (e.g., James, 1884; Lange, 1885; Russell, 2003; Scherer, 2004; 2005), *motivational contributions* (e.g., Frijda, 1986; 1987; 2010), and lastly, the *cognitive evaluation of an event* (e.g., Arnold, 1960; Ellsworth & Scherer, 2003; Lazarus, 1991; Roseman, 2001; Scherer, 2001; 2009). Although various theories of emotions exists, as stated above, contention has been made to view emotions as not composing of one component, but rather as a framework of components (Mesquita, Frijda, & Scherer, 1997). In effect, the Component Process Model (CPM) (also componential emotion theory, CEA) was proposed. This proposal did not discard the theoretical assumptions from the other theories, rather utilising the basic premises of them and acclimatising it to fit the component process model.

The CEA can be characterised as a dynamic integrative framework, where emotion processes, following an event, can be regarded as congruent or incongruent with the individual's goals, needs, and values (Scherer, 2009). The basic premise of the CEA is that an emotion signifies the reaction of significant events that prepares the individual to adapt as from Darwin's (1872) theory of evolution. In addition, the CEA suggests that an event or situation and the consequences thereof are appraised with a set of criteria, which is known as the appraisal component. The result of these appraisals will have a motivational effect (action tendency), which will change or modify the motivational state prior to the occurrence of the event, known as subjective feelings. Due to these appraisals and motivational changes, changes will occur in the autonomic nervous system (physiological occurrences) and somatic nervous system (motor expressions) (Scherer, 2001; 2005; 2009). All of these substrates, appraisals, action tendencies, somatovisceral changes, and motor expressions are centrally represented by a feature profile which denotes the meaning of emotions (Fontaine *et al*., 2013). In addition, these components also interact in a coordinated fashion. As such, in-depth discussion will following regarding each component.

Appraisals

Arnold (1960), firstly, articulated thoughts on appraisals by exclaiming emotions as elicited due to the event being appraised on three dimensions or criteria: beneficial versus harm, presence versus absence of an object, and relative difficulty in approaching or avoiding the latter. In addition, she also became famous for her work in "an excitatory theory of emotion", which proposes that emotions such as fear, anger, and excitement could be distinguished by an excitatory phenomenon (Arnold, 1950; Scherer, Shore, & Johnson, 2001). She, moreover, also described emotions that are either good or bad for the individual, which leads to an action. For example, when a student continuously studies hard for a difficult exam and pass with distinction, the student will feel happy emotions which will motivate them in working even harder in the class. Following close to Magda Arnold was the subsequent appraisal theorist, Lazarus (1966) who took the theory of appraisal even further by arguing that both stress and emotions are elicited by a two-stage appraisal process: (a) *primary appraisal*, referring to the event as being positive or negative for one's own wellbeing, and (b) *secondary appraisal*, which refers to the ability of the individual to cope with the consequences of the event or emotional episode. Lazarus (1966) proposed the concept of re-appraisal whereby an individual appraises the same situation based on new information acquired. Following Arnold (1960) and

Lazarus (1966), numerous scholars sought to define appraisal in their own way (Scherer, 1984; 2001; 2009; 2013; Roseman 1984; 1991; Roseman, Antoniou, & José, 1996; Roseman & Smith, 2001; Smith and Ellsworth, 1985; Weiner, 1985; Frijda, 1986; 2007; Oatley & Johnson-Laird, 1987; Ortony, Clore and Collins, 1988; 2000). These appraisal theories differ in their scope, theoretical underpinnings, and focal point. For instance, Weiner (1985) stresses the provenance of agency and control, accounting for internal (e.g., emotion such as shame is elicited) and external (e.g., emotion such as anger is evoked) attributions, whereas Frijda (1986; Frijda, Kuipers, & ter Schure, 1989) considers action readiness as the core of the emotional response. The central theme regarding Frijda's theory is the term "concern". Concern refers to the nature of an individual to prefer a certain state of the environment, and therefore, goals and preferences are developed for the environment. If the individual has problems to realise these concerns, an emotion is elicited. Ortony, Clore, and Collins (1988; 2000), on the other hand, considers appraisals as a cognitive structure of emotion concepts. In other words, an assumption is made that emotions are elicited due to certain cognitions and interpretations of an event and the consequences follows a valence reaction (e.g., pleased/displeased, like/dislike). Oatley and Johnson-Laird (1987) focused their theory on propositional communication and non-propositional communication. They postulate the basic premise of their theory as "each goal and plan has a monitoring mechanism that evaluates events relevant to it. When a substantial change of probability occurs of achieving an important goal or subgoal, the monitoring mechanism broadcasts to the whole cognitive system a signal that can set it into readiness to respond to this change. Humans experience these signals and the states of readiness they induce as emotions" (Oatley, 1992, p. 50). Roseman and colleagues (1979; 1984; 1991; Roseman, Antoniou, & José, 1996; Roseman & Smith, 2001) offers their view on appraisals stating that five cognitive dimensions (e.g., non-characteristic/characteristic x motive consistent/motive inconsistent x unexpected x low/high x circumstances/others/oneself) can be utilised to determine whether an emotion is elicited and specifically which one. Smith and Ellsworth (1985), on the contrary, suggests six cognitive appraisal dimensions to differentiate an emotional experience, they are, pleasantness, anticipated effort, certainty, attentional activity, self-other responsibility/control, and situational control (Tesser, 1990). Lastly, Scherer (1984; 1993; 2001; 2009; 2013) posit his theory regarding appraisals which he calls stimulus evaluation checks (SEC). Scherer (1987; 2005) asserted the basis for operationalising the appraisal component within the CEA, as well as basic theoretical underpinnings of the other appraisal theories. According to the CEA, an appraisal can be defined as a subjective evaluation, in terms of four appraisal objectives/SEC checks, of the

significance of an event towards an individual's wellbeing and if a goal is reached, an emotion will be elicited, which follows a set of response patterns. Grandjean, Sander, and Scherer (2008) and Scherer (1987) postulate that four objectives/SEC checks enable the individual to readily adapt to the noticeable event: (a) *Relevance*, referring to how relevant the event is to the individual and if it affects them; (b) *Implications*, refers to the implications of the event on the individuals wellbeing and goals, needs, and values; (c) *Coping*, which indicates if and how well the individual can cope with the consequences of the event; and (d) *Normative significance*, as in what is the significance of the event for my self-esteem and social norms. It is essential to note that the appraisal process, based on these objectives, does not require a complex, cognitive calculation due to the fact that it often occurs in an automatic, unconscious manner (Scherer, 2009). As for the operationalisation of the appraisal component within this study, these stimulus evaluation checks was utilised as the foundation, in combination with the social aspect of an appraisal (Fontaine *et al*., 2013) and the core relational theme of Lazarus (1991; Smith & Lazarus, 1993). As such, the basic premise, in accordance to the CEA, is that the appraisal system chronologically processes these appraisal checks in order to achieve a complete interpretation of the situational antecedents and the possible consequences for the individual, which drives the changes in the other subsequent emotion components.

Subjective Feelings

The concept of "subjective feeling" poses a rather challenging view due to various researchers denoting the concept to different definitions, which may cause confusion regarding the true definition of subjective feelings (Barrett & Russell, 1999; Parkinson, Totterdell, Briner, & Reynolds, 1996; Russell, 2003). However, concepts such as *affect* (Watson & Tellegen, 1985), *activation* (Thayer, 1989), and *mood* (Morris, 1989) are used interchangeably with what is known as feelings (an in-depth description will follow below). Consequently, the feeling component has always been considered as similar to emotions, leading to confusion (James, 1890). Thus, when a feeling component is represented, it is important to make a distinction between a feeling as a general awareness of a change in the general feeling state of the organism and a feeling as an awareness of the ongoing emotional process (Russell, 2003). The former represents a general feeling in terms of feeling good, bad, weak, and strong, whereas the latter represents emotion terms: anger, joy, sadness, and guilt. As such, it is of the utmost importance to differentiate between emotions and feelings as they serve very different functions. Within literature, one very particular theory regarding feelings paved the way to immensely complex

discussions regarding what encompasses feelings (Kriegel, 2014). This so-called James-Lange theory (James, 1884; Lange, 1885) ascribed the concept of feeling to somatic occurrences. They attributed these occurrences to be typically visceral, y*et al*so muscular or skin-related. For example, they posit that seeing a snake will evoke physiological arousals such as a racing heart, lungs inhaling, and muscles tensing, thus, as a result, the individual will equate the physiological occurrences as feeling fear (Kriegel, 2014; Prinz, 2004). However, Cannon (1922; 1927) added to the James-Lange theory of physiological occurrences by stating that feelings represents more than just the surface presentations of physiological occurrences. He postulates that individuals associate the digestive organ as representing feelings. For example, when one attends an interview for a significant job and experiences heaviness in the stomach, Cannon makes the assumption that therefore, one is feeling nervous. However, Schachter and Singer (1962) took it one step further by elaborating on both James-Lange and Cannon's theory. They hypothesize that cognitive, subjective influences may be the major attributing factor of emotional feeling states as also suggested by others (Hunt, Cole, & Reis, 1958; Kriegel, 2011; Ortony, Clore, & Collins, 1988; Ruckmick, 1936; Schachter, 1959). In other words, they suggest that an emotional feeling state are attributed to physiological occurrences, y*et al*so a cognitive evaluation appropriate to this state of arousal. In addition, their definition of cognition evaluations sprung from previous experiences, the way human beings are brought up, and exposure to social interactions (Schachter & Singer, 1962). For example, they posit that when a man walks alone in a dark alley and acknowledges the appearance of a figure holding a gun, an immediate physiological arousal (e.g., palpitations) will occur as a result of the perception-cognition "man with a gun", resulting in feeling fear. This perception-cognition is interpreted, from previous experience, as dark alleys are threatening to one's own wellbeing, and therefore fear is evoked. Russell (2003) also agrees with Schachter and Singer (1962) by further exploring cognition as the determining factor for experiencing certain feelings. He provides his own definition of feelings as "core affect is that neurophysiological state consciously accessible as the simplest raw (non-reflective) feelings evident in moods and emotions" (Russell, 2003, p. 148). However, Russell (2003) agrees with Oatley and Johnson-Laird (1987) by arguing than a feeling can also be free of a cognitive structure. In other words, most theorists suggests that a feeling is related to the cognitive evaluation directed towards an object (e.g., I am angry at you). In addition, he claims that a feeling is the evaluation of one's current state, as well as one's sense of mobilisation and energy. For example, feelings can denote to nothing else (e.g., I feel good) or represent a hint of core affect (e.g., I feel good about myself). The feel good aspect can be attributed to the core affect and the about concept can

refer to the additional (cognitive) component. In terms of the CEA, the concept of feeling and emotion is also differentiated (Fontaine *et al*., 2013; Scherer, 2009). Emotion, on one hand, refer to the synchronisation of activity in the five organismic substrates which prepares the individual to adapt to the current situation, whereas a feeling brings the emotion process into cognitive awareness at various levels of richness and intricacy (Fontaine *et al*., 2013). On the other hand, the feeling is said to be the emerging component during the emotion experience which serves as a monitoring and regulating function and feelings assimilate the central depiction of appraisal-driven response association in emotion (Scherer, 2004). The operationalisation of the feeling component within the CEA, which is based on the feeling features of the GRID (Fontaine *et al.*, 2013), were constructed in accordance to five very unique affect models. They are, the *positive affect-negative affect model* of Watson and Tellegen (1985), the *pleasant-arousal model* of Russell (1980), the *pleasant-activation model* of Larsen and Diener (1992), the *tense-arousal and energetic-arousal model* of Thayer (1989), and the *three dimensional model of valence, power, and arousal* as from Osgood and colleagues (Osgood, May, & Miron, 1975; Osgood, Suci, & Tannenbaum, 1957). In short, the positive-negative affect model of Watson and Tellegen (1985) assumes that feelings are proposed on a negative and positive dimensional unipolar streak. The positive affect dimension represents the extent to which an individual experiences positive, pleasant feelings (e.g., I feel positive, I feel good), whereas the negative affect refers to the experience of feelings attributed to negativity or unpleasantness (refer to Watson & Tellegen, 1985; Watson, Clark, & Tellegen, 1988; Watson, Wiese, Vaidya, & Tellegen, 1999 for comprehensive description regarding this model). The pleasant-arousal model of Russell (1980) and the pleasant-activation model of Larsen and Diener (1992) are vastly similar in terms of what they propose regarding feelings. They both share the central concept of the hedonic (e.g., pleasure vs. displeasure) quality of feelings, but one takes on the arousal dimension and the other the activation dimension. Regarding the tense-arousal and energetic-arousal model of Thayer (1989), the basic premise of this theory is that feelings can represent a tenseness component (e.g., I feel restless) and/or an energetic component (e.g., I feel alert). Lastly, the three dimensional model of Osgood and colleagues (Osgood, May, & Miron, 1975; Osgood, Suci, & Tannenbaum, 1957) refers to valence, which means that feelings ranges from positive to negative; power, anger terms are opposite fear terms; and arousal, which describes sadness terms as oppose to fear terms. As such, the feeling component within the CEA comprises of the following features: felt positive, felt good, felt at ease, felt strong, felt in control, felt energetic, felt powerful, felt dominant, felt

calm, felt restless, felt submissive, felt out of control, felt nervous, felt tired, felt exhausted, felt weak, felt negative, felt powerless, and felt bad.

Motor Expressions (Face and Voice)

As mentioned previously, an appraisal is the first sequence check before an emotion is conveyed due to the event being either appraised as positive, desirable or negative, undesirable based on the appraisal criteria (Scherer, 2001; 2005). As a result to this discourse, the individual will communicate some form of emotional expression(s) such as facial or vocal expressions.

Facial Expression of emotions: Facial expressions has long been studied by Ekman (1991) and colleagues (Izard, 1991; Plutchik, 1991), which denote facial expressions as the "mirror of the soul" (Fontaine *et al*., 2013). Research on facial expressions emanated from Darwin in 1872. He proposed that human beings have different facial expressions which, involuntarily, are elucidated for the different types of discrete emotions. Involuntary due to the survival (fight or flight) nature of humans as a means to adapt to the challenges of today (Darwin, 1872). Darwin's theory revolves around prototypical, universal facial expressions for the discrete emotions and that these facial expressions are the visual, communicative representations of the unobservable emotional processes within (Ekman, 1994; Izard, 1994). For example, joy is expressed by raising the corners of the mouth, indicating a smile, whereas for anger, the eyebrows are lowered and lips compressed together (Darwin, 1872; Freitas-Magalhães, 2012; Hess & Thibault, 2009). Ekman (1971; 1972), in collaboration with others (e.g., Ekman, Sorenson, & Friesen, 1969) conducted numerous studies and found universal facial expressions for the six prototypical emotions (known as anger, disgust, fear, joy, sadness, and surprise). They validated these research findings by showing individuals, from different cultures, various facial expressions and requesting of them to select the emotion term which best represented the facial expression. As a result, their findings produced valid inferences regarding the universality of facial expressions and cultural specific universality (Elfenbein & Ambady, 2002; Izard, 1971). However, Ellsworth (1991) argued against this theoretical perspective due to the fact that even though these discrete emotion theorists provided evidence for universal facial expressions, they failed to provide evidence which interprets facial expressions as distinct indicators of emotions in an unprompted interaction; in other words, spontaneous interactions. Therefore, Scherer (2001) and Leventhal and Scherer (1987), proposed to rectify this facial expression predicament by exploring the relation between emotion-antecedent

appraisals and facial expressions. In that way, facial expression is determined by an appraisal result (Scherer, 1984, 2001, 2009; Smith & Scott, 1997). These appraisal results/criteria refers to the relevancy of the situation; the specific implication incurred based on the individuals goals, needs, and values; the capability of the individual to deal with the consequences of the situation; and the normative significance of the situation (Scherer, 1984; 2001). For example, the emotion of "anger" is due to the appraisal of the event as obstructing a particular goal, satisfying a need, or indicating incongruence with a certain value; therefore the individual will communicate their dissatisfaction regarding the outcomes of the event by means of a certain facial expression: frowning, or knitted brows (Scherer & Ellgring, 2007). As these studies were conducted by matching facial expressions with a certain emotion terms, findings only produced universal results.

However, componential emotion theorists somewhat disagree with the way in which facial expressions are measured, positing that several facial expressions can be produced with a singular emotion term (Fontaine *et al*., 2013). In addition, they were also challenged with the notion of insufficient vocabulary for emotion specific facial expressions. For example, participants only reported "to make an angry, to make a happy face" (p. 156). As such, they attempted to utilise the Facial Action Coding System (FACS), developed by Ekman and Friesen (1978). In short, the FACS is an all-encompassing, anatomically based system which measures all visual discerning facial expressions based on 44 unique action units (Ekman & Friesen, 1978; Ekman & Rosenberg, 1997). Due to the peculiarity and training required to apply FACS, Fontaine and colleagues (2013) proposed a unique method to measure facial expressions, which comprises of frequently used facial expression descriptions based on the FACS (Ekman & Friesen, 1978) and Scherer and Ellgring's (2007) findings based on a study conducted among actors (see. Scherer & Ellgring, 2007 for comprehensive description). This method consist of building block such as smiles, felt his/her jaw drop, pressed his/her lips together, felt his/her eyebrows go up, frowned, closed his/her eyes, opened his/her eyes, had tears in his/her eyes, and did not show any facial expressions, in measuring facial expressions. Fontaine *et al*. (2013) cross-validated this study and found favourable results.

***Vocal Expression of emotions*:** Research on vocal expressions of emotions dates back to the Ancient Greek and Roman era, whereby philosophers such as Aristotle, Quintilian, and Cicero (as cited in Scherer, 2003) firstly introduced vocal expressions in human beings as a means to communicate their psychological state. Cicero (1975) made the following statement regarding

vocal expressions of emotions "there are as many movements of the voice as there are movements of the soul, and the soul is strongly affected by the voice" (p. 46). Darwin (1965) also provided his statement regarding vocal expressions, whereby he stated "with many kind of animals, man included, the vocal organs are efficient in the highest degree as a means of expression…when the sensorium is strongly excited, the muscles of the body are generally thrown into violent action; and as a consequence, loud sounds are uttered" (p. 83). Such statements provided evidence that human beings do express their emotion in vocal cues. Vocal expressions can serve the purpose as incentives of behaviour during social interactions by means of two interrelated mechanisms (Keltner & Kring, 1998).

Firstly, as we communicate emotions through vocal cues, important information is transferred which takes on an influential approach. In other words, human beings influence the behaviours of others via their vocal gestures, whether it is for social, personal, or political gain. For example, when two colleagues find themselves in a heated argument, consequently causing one to fell silent as a result of the other's dominating voice, the offender might reconsider his/her tone of voice and either direct the conversation or exit the conversation (Van Kleef, Van Doorn, Heerdink, & Koning, 2011). In addition, humans can also make inferences regarding other's behaviour and probable response patterns based on their vocal communications (Darwin, 1872; 1998; Plutchik, 1994). For example, when an individual starts to shout (high-pitched vocal cue) in a social setting, inferences can be made regarding a distressed state of mind activated in the individual.

Secondly, vocal expressions can be deemed as a strategy in regulating social behaviour by means of evoking emotional responses in the decoder (Russell, Bachorowski, & Fernandez-Dols, 2003). Pittam and Scherer (1993) lay claim to three ways that can be utilised as a means to make inferences regarding emotions by means of vocal cues: loudness or intensity, pitch, and time. In short, *loudness* can be seen as a measure regarding the pressure of the voice uttering mechanism. Two vocal cues, with similar amplitudes but different frequencies, will require a different amount of energy to produce them. As a result, the vocal cue with the higher frequency (amount of pressure exerted) will produce a louder or higher-pitched sound (Laukka, 2004; Pittam & Scherer, 1993). As a result, an inference regarding a higher pitched vocal cue can indicate either a state of anger or, conversely, an overwhelming excitement. However, it was found that intensity of voice or sound production is immensely difficult to interpret as an affective state of the human being due to distance and spatial orientation, as well as the

individuals own voice calibration system that is inherent. However, intensity can still, with caution, be used to measure the affective state of the individual. *Pitch*, on the other hand, refers to the way in which the vocal folds in the human anatomy vibrates (Pittam & Scherer, 1993). It may vary in intensity and changes rapidly based on individual differences. Relating it to emotion, varieties in pitch may indicate a certain affective response within the individual (Bänziger, Hosoya, & Scherer, 2015; Scherer, 1995). For example, when a human being utters a high-pitch scream during a festivity, it can be deemed as a positive affective state, conversely, hearing a high-pitched scream while walking past a dark alley can induce negative appraisal patterns. Lastly, *time*, refers to the classifications of sound and silence. Various emotional states may be characterised by various uttering lengths and speech production rates. For example, to fell silent during a social interaction may indicate a short micro pause in order to articulate thoughts, or it may reflect a hesitation behaviour.

Applying Ekman (1982) and Izard's (1977) description of six basic emotions, Scherer and colleagues (Scherer, Banse, & Wallbott, 2001) conducted a study as a means to measure the relation between vocal expressions and emotions by asking actors to act as if they were confronted with the situation in real life. From the study, 88 voice utterances were identified and were edited onto a tape recorder in random order in which university students were then asked to rate the emotional condition expressed in each stimulus on a rating scale of 1 (*not at all*) to 6 (*intense*). Results indicated that vocal representations were identified for four different emotions (i.e., anger, fear, joy, and sadness) indicating that vocal expressions are linked to emotions. Further studies were conducted in an attempt to measure the vocal expressions and its relation of emotions. This studies were based on the emotional competence ability framework in terms of emotion meanings as from Scherer (2007), where the Index of Vocal Emotion Recognition (VOCAL-I: Scherer and Scherer, 2011) was developed. The VOCAL-I is a computerised measure that requests of participants to select emotion terms based on vocal sounds incurred (see. Scherer & Scherer, 2011 for a comprehensive discussion). According to Fontaine *et al*. (2013) such emotional configurations of the voice is not easily accessible and specialised training is required, making it difficult to use this method. As such, they proposed to select vocal features that best represented the acoustic variations generally found in vocal expressions (Scherer, Johnstone, & Klasmeyer, 2003). These vocal included spoke faster, increased the volume of voice, changed the melody of his/her voice, fell silent, decreased the volume of voice, spoke slower, produced speech disturbances, had a trembling voice, produced

short utterances, produced a long utterance, had an assertive voice, and did not produce any vocal expressions. As such, these features are used for this study.

Action Readiness/Tendency

Action tendency (or preparation) is viewed as one of the possible consequences of changes in core affect which have been conceptualised in broad behavioural tendencies. In essence, the purpose of an emotion is to prepare the individual for adaptive behaviour during an emotional episode or event which increases their likelihood of survival (Frijda, 1988; Nesse, 2004; Plutchik, 2003). Thus, the individual can react in either an appetitive (approach; drawing near; moving towards) or defensive (withdrawing; attacking; move away) manner (Frijda, 2010; Maxwell & Davidson, 2007; Nesse, 2004). Action tendencies within the dimensional paradigm, which links action tendencies to affect, has received the least amount of attention (Russell, 2003). The dimensional theorists see action tendencies as a consequence of a change in affect. They focus, especially, on the appetitive and defensive tendencies as mentioned above (Nesse, 2004). Conversely, the basic emotion theorists postulates that each discrete emotions has their own behaviour tendency. For example, when one is joyful, the action propensity of moving towards or approaching the object is evident; fear is expressed by an inclination to flee or to move away; anger expresses a motivational behaviour pattern of aggression or wanting to move against; whereas when one is sad, one is motivated to show apathy or wanting to cease the behavioural tendency (Darwin, 1872; Ekman, 1972; Izard, 1977; Tomkins, 1962).

Frijda (1987) defines action readiness as "readiness to engage in action for establishing, maintaining, or breaking relation with particular aspects of the environment (action tendency), or as readiness to engage in relational action generally" (activation mode) (p. 132). Accordingly, a certain appraisal of an event may elicit a motive state or action propensity, which induces any action, followed by physiological behaviour occurrences. In other words, the appraisal process produces a motivation to adapt towards the event. Depending on the importance that the individual attaches to the expected consequences, a primary goal in that specific moment may be generated (e.g., survive or self-assertion). As soon as the consequences and the individual's response potential is evaluated, the individual will then go about to restructure the current goal. Thereafter, the individual will examine all the action response alternatives with respect to either the cost of benefit involved to the individual. The result of this selection causes the individual to produce specific action propensities which

enables them to rapidly engage in certain behavioural responses (e.g., fight, flight, avoid, and withdraw) (Frijda, 1987; Frijda, Kuipers, & ter Schure, 1989; Scherer, 2001).

In relation to the study conducted with the CEA (GRID: Fontaine *et al.*, 2013), action tendency was measured by requesting participants to rate episodes from their own life, whereby they experienced a certain emotion, on the presence of certain action tendency modes (Fontaine *et al*., 2013). The results produced 57 different action propensity operationalisations, which represented 16 categories, namely, approach, avoidance, being-with, attending, rejection, indifference, antagonism, interruption, dominance, submission, apathy, excitement, exuberance, passivity, inhibition, and helplessness (Frijda, 1987). In other words, when individuals appraise a certain event, they are likely to respond in these 16 modes as a means to adapt to the event. As a result of this process, 40 action tendency modes on which individuals can act as a means to express and communicate their emotions were reported: wanted to do damage, hit, or say something that hurts; wanted to destroy, whatever was close; wanted to oppose; wanted to break contact with others; wanted to prevent or stop sensory contact; felt the urge to stop what he/she was doing; wanted to keep or push things away; felt inhibited or blocked; wanted to run away in whatever direction; wanted to go on with what he/she was doing; wanted to get totally absorbed in the situation; wanted to sing and dance; wanted to submit to the situation as it is; wanted the ongoing situation to last or be repeated; wanted to comply to someone else's wishes; wanted to take care of another person or course; wanted to be near or close to things; wanted to be tender, sweet and kind; wanted someone to be there to provide help or support; wanted to make up for what he/she had done; wanted to undo what was happening; wanted to withdraw into him/herself; wanted to be hurt as little as possible; wanted to disappear or hide from others; wanted to hand over initiative to someone else; wanted to flee; wanted to show off; wanted to be seen, to be the centre of attention; wanted to do nothing; lacked the motivation to pay attention to what was going on; lacked the motivation to do anything; wanted to be in command of others; felt an urge to be attentive to what was going on; wanted to move; wanted to take initiative he/herself; wanted to be in control of the situation; felt an urge to be active, do something, anything; wanted to act, whatever action it might be; wanted to overcome an obstacle; and wanted to tackle the situation.

Physiological Changes

This component was firstly pioneered by James (1884), Lange (1885), and Cannon (1922) first as relating to physiological occurrences to emotions. James's (1884) theory relates itself to the notion of the conscious experience of an emotion. He argues that "The emotion is nothing but the feeling of the reflex bodily effects of what we call it 'object'" (James, 1884, p. 194). For example, when a person is crying, he reasons that this individual must be sad or seeing a bear evoked certain physiological responses, such as quivering, consequently, the individual becomes afraid and flees. In effect, physiological occurrences precedes emotional experience (Moors, 2009). The physiological process of the emotional experience can be described as a certain object that has an effect on a sense organ and communicates this particular information to the cortex. In other words, a stimulus activates the sensory cortex. The brain then transfers this information to the autonomic nervous system (ANS), which includes the muscles and viscera (Larsen, Berntson, Poehlmann, Ito, & Cacioppo, 2008). As a result, responses in the peripheral autonomic nervous system is elicited whereby the impulses from the ANS system are sent back to the cortex, which, in turn, transforms the object from an "object-simply detained" to an "object-emotional experience". Lange (1885) shared the same notion of an emotion that is elicited due to the physiological response of a stimulus, but he attempted to interpret the theory by conceptualising it. He attributed emotions to fluctuations in the blood circulation system and attempted to locate the neuroanatomical structure which evokes emotions. Also, he somewhat presented the idea of mental entities which evokes certain emotions (Wassmann, 2010). For example, ideas, experiences, or memory served as a sensory impression in which changes in the vascular system occurs, which in turn, activates mental functions; in other words, an emotion is elicited. He points that the mind and the body serves as one unity, however, the neuroanatomical locus of processing overpowers the mental entity (see. Wassmann, 2010 for an in-depth description of Lange's theory). The workmanship of both James (1884) and Lange (1885) lead to them joining forces to develop the James-Lange Theory. In short, the James- Lange Theory (James, 1884; Lange; 1885) posit that physiological arousals is the primary force that instigate the emotional experience as a result of the brain that reacts to information via the autonomic nervous system (Cannon, 1927; Lang, 1994; Kriegel, 2014; Prinz, 2004). However, the James-Lange theory was critiqued by Walter Cannon (1871-1945) and Philip Bard (1898-1977) as they further explored the relation between physiological occurrences and emotions. Their workmanship contributed to the establishment of the Cannon-Bard Theory. The Cannon-Bard theory suggests that physiological arousal does not have to

occur prior to the emotion (Lang, 1994; Mesken, 2006; Sanz, Hernandez, Gomez, & Hernando, 2010). Rather, they proclaim that the appraisal of a certain event causes physiological occurrences and the emotion simultaneously; they do not affect each other as they work independently; in other words, the bodily sensations is just an aftermath of the emotional experience (Lungu, 2010; Mesken, 2006). They posit that the time it takes for the sensory cortex to send feedback to the brain is too long for the emotion to be elicited after the bodily occurrence. For example, upon seeing a bear, James-Lange posited that one's body will first show changes (e.g., shivers, tremble) and then the emotion will be evoked (e.g., afraid) and thereafter one will flee, whereas for Cannon-Bard, one will see the bear, an emotion of afraid will be evoked, consequently followed by shivers, and then one will flee. Also, they argued that the same visceral occurrences that happen in an emotional state (shivers from seeing a bear) can also happen in a non-emotional state, for example, laughing when one is being tickled and get goose bumps (Kriegel, 2011; Weisfeld & Goetz, 2013).

In relation to operationalisation of the bodily sensation component (GRID: Fontaine *et al.*, 2013), the work of Stemmler (2003) and Scherer, Wallbott, and Summerfield (1986) served as the basis of the typical physiological reactions to emotional episodes. For example, Scherer *et al*. (1986) identified typical patterns of bodily reactions such as cardiovascular activation, musculoskeletal tension, gastric mobility, and skin temperature conditions. In a study conducted by Scherer and Wallbott (1994) they identified self-report bodily sensations that was used within the GRID, such as lump in throat, change in breathing, gastric problems, feeling cold/shiver, feeling pleasant/warm, feeling hot/cheeks burning, heartbeat increases, tense/tremble muscles, relaxing/restful muscles, perspiring/moist hands, and other uncategorised symptoms, felt weak limbs, got pale, felt shivers, had stomach troubles, lump in throat, muscles tensing (whole body), breathing getting faster, perspired or moist hands, sweat, heartbeat increasing, muscles relaxing (whole body), heartbeat decreasing, felt warm, blushed, felt hot, felt cold, and had no bodily symptoms at all.

The following is presented in the rest of the article: structures methodology process implemented, presentation of the findings, discussion of the findings which are linked to relevant literature, subsequently followed by a conclusion and possible recommendations and limitations for future research and practise.

Research design

Research approach

A qualitative, phenomenological research design was utilised. This design best represented the inimitable technique which will produce the most significant results required to answer the research questions and to reach the study objective. The qualitative approach can best be defined as a technique used to describe, understand, and capture the essence or significance of a certain complex phenomenon from the participant's standpoint (Creswell, 2009; Edmonds & Kennedy, 2013; Leedy & Ormrod, 2014). This approach is significantly differentiated from quantitative as the focus is on a non-statistical, as well as an interpretive, naturalistic method to analyse the data (Borbasi & Jackson, 2012; Draper, 2004; Pope & Mays, 2006). The researcher's ontology and epistemological assumptions streamed from a constructivism paradigm (de Vos *et al*., 2011; Saunders, Lewis, & Thornhill, 2007). Within this particular paradigm, the qualitative researcher views the social world as dynamic and complex (Botma, Greeff, Mulaudzi, & Wright, 2010). Dynamic and complex in the sense that the participant construct their reality, with regards to the experience of a certain phenomenon, from social interactions as well as their belief of the phenomenon as from their imagination (Creswell, 2009). In other words, their reality is not seen as objective, but rather socially constructed whereby a meaning was attributed to the phenomenon (Easterby-Smith, Thorpe, & Lowe, 2002).

Furthermore, the researcher utilised the phenomenological paradigm in order to attain a successful and significant depiction of the complex phenomenon under study as it unfolds the intentionality and hidden meanings of certain experiences within a specific environment or situation (Olausson, Ekebergh, & Österberg, 2014). The basic notion of the phenomenological paradigm lies in the understanding and description of several participants' immediate experiences of the phenomenon under study, also known as the "life world" of the individual (Burns & Grove, 2001; de Vos *et al*., 2011) and the exploration of the conscious perceptions, sensations, and meanings they derive from it (Burns & Grove, 2009; Jirojwong, Johnson, & Welch, 2014; Liamputtong, 2013). As such, this specific research design is accounted for the fact that the researcher desires to gain a deeper understanding of the emotional experiences, according to the componential emotion approach, and the situation-specific emotions that

nurses' experience in order to provide an eidetic structure of the phenomenon for the South African context (Burns & Grove, 2009). Furthermore, through this approach, the reality of the participants' experiences cannot be reduced to a simplified number or statistic (Hoffmann, Bennett, & Del Mar, 2013), but rather constructed into a meaningful reality, as lived by them, and not based on predetermined expectations or assumptions (Hudson, Duncan, Pattison, & Shaw, 2015; Husserl, 1970).

Research strategy

Within the phenomenology paradigm, two distinct methods/approaches were utilised: hermeneutics/interpretive or transcendental/descriptive (Finlay, 2011; Lopez & Willis, 2004; Moustakas, 1994; Petty, Thomson, & Stew, 2012). Firstly, the *hermeneutics or interpretive* approach, as discovered by Martin Heidegger (1889-1976), focuses on an in-depth interpretation of the human phenomenon and further explored the meaning, casualties, and implication embedded in the phenomenon experience (Creswell, 2013; Delanty, 2006; Laverty, 2003; Van Manen, 1990). The second approach, known as the *transcendental or descriptive* approach, originated from Edmund Husserl (1859-1938), reflects the process of firstly obtaining the commonalties in the experience of the complex phenomenon and then consequently describing the experience devoted to it (Moustakas, 1994; Polkinghorne, 1983; Welton, 2000).

For the purpose of this particular study, the transcendental approach was selected due to the fact that it enabled the researcher to describe the phenomenon, in detail; no interpretation or exploration was invited, encouraged (Moustakas, 1994; Welton, 1999; Wojnar & Swanson, 2007). The motivational purpose for choosing this strategy was due to the limited studies (see Fourie, 2010; Jonker, Van der Merwe, Fontaine, & Meiring, 2011; Masombuka, 2011; Mojaki, 2011; Nicholls, 2008; Rauch, 2009; Van der Merwe, 2011) being conducted within the South Africa context, especially with regards to the CEA, and no other study included the dynamic synchronization, influence, and overall component composition of the CEA. Therefore, the researcher primarily desired to ascertain the viability, practicality, and significant implications of the CEA phenomenon, before hidden manifestations of the phenomenon is explored (Lopez & Willis, 2004). Also, several other studies confirm favourable results with the utilisation of

this approach among nurses (see Anderson, 2015; Close *et al*., 2013; Olausson, Ekebergh, & Österberg, 2014; Smith, Fisher, & Mercer, 2011).

In addition, within this approach, the researcher developed a *textural description* (what the participants experienced), a *structural description* (how the participants experienced a certain phenomenon), and a *combination* of the textural and structural description to convey a *universal essence* or *structure* of the phenomenon (Creswell, 2013; Moustakas, 1994; Welton, 1999; 2000). By executing these three description processes, the researcher was able to establish and describe what nurses experience in their daily working environment with regards to critical incidents, emotional episodes, and different emotions (textural description), how the nurses experience the CEA phenomenon with regards to the five components (e.g., motor expressions, subjective feelings, appraisals, physiological changes, and action tendencies) (structural description) within the different incidents, and consequently developed a universal, eidetic profile for the CEA phenomenon, within the South African population.

Research method

The research method consists of the research setting, entrée and establishing researcher roles, sampling, research procedure, data collection methods, data recording, strategies employed to ensure data quality and integrity, ethical considerations, data analysis, and reporting style.

Research setting

The research setting was allocated at the offices of the Unit of Open Distance Learning (UODL) at the North-West University, Potchefstroom Campus. By selecting this specific location, it allowed for the researcher to attain access and cooperation easily and the researcher could freely move about and collect data within this location due to the fact that the research setting is known and familiar to the participants (de Vos *et al*., 2011). The study was conducted by means of an in-depth one-on-one interview with the UODL nurses. A private and secure office was chosen to ensure that the participants feel comfortable and at ease and the interview can be carried out without interruptions.

The researcher greeted the nurses in a welcoming and inviting manner as to establish a comforting relationship whereby the nurses can feel free to share their stories in an innocuous environment. After rapport was established with the nurses, the purpose of the study was explained, thereafter permission was asked to tape-record the interviews. The researcher, then, allowed for any concerns or questions to be raised and answered, whilst requesting the nurses to complete an informed consent permitting the continuance of the interview and agreeing to a voluntary process. By following these crucial steps, the researcher could maximise opportunity for participants to be fully engaged within the research problem (Erlandson, Harris, Skipper, & Allen, 1993).

Entrée and establishing researcher roles

Before commencement of the research study, permission from all the pertinent key-authority figures were obtained by means of utilising a gatekeeper. A gatekeeper can be seen as an individual who holds the authority to provide access to the prospective research field and the participants, and who is also the link between the researcher and the participants (de Vos *et al*., 2011; Sparrman, 2014; Townsend, Cox, & Li, 2010). Therefore, the following process were followed in order to obtain full access to commence with the research study. Firstly, as the participants involved the nursing students registered with the UODL in Potchefstroom, permission from the UODL Unit Management was obtained by organising a meeting with the unit manager to discuss the purpose, possible ethical implications, duration, methodological procedures (e.g., data collection methods, recording of data) and goals of the researcher's study (Bailey, 2007). After the discussion, any concerns or questions were addressed and verbal consent was given as a means to ensure validity and continuance of the study.

After verbal permission was gained from the UODL Unit Heads, the next step involved allocating and informing the participants (nursing students) of the study. The researcher was allowed to provide a short presentation of their research study to them before their classes commenced. Within that presentation, awareness is made as to what is required of them, the purpose and goals of the study, the process to be followed as soon as they agree to this voluntary process, and how ethical considerations, such as confidentiality, is maintained. The researcher ensured an open space to allow for any questions or concerns, thereafter the researcher requested of the voluntary nurses to complete a biographical form in order for the researcher to contact them to schedule an interview that best suited their availability.

The last channel where permission were to be obtained was with the North-West University's Ethics Committee and Faculty Research Committee. A comprehensive research proposal was presented to the committees in order for them to have a thorough understanding of the researcher's study, as well as to discuss any ethical implications. After the proposal meeting, permission was granted to commence with the study with the exception that the researcher ensures that the necessary individuals be on-call when needed (e.g., psychologists for further probing if the need arises).

During the research study, the researcher had to adopt various sequential roles which enabled them to execute their study successfully. Firstly, the researcher adopted the role of research coordinator whereby they ensured to execute quality measures with regards to the planning of the research, such as sample recruitment, informed consent completion, data collection, data analysis. From the coordinator role emanated the role of interviewer (Creswell, 2009; de Vos *et al*., 2011).

With regards to the interviewer role, the researcher implemented questioning strategies, active listening, probing, and empathetic attending skills. In addition, during the interview, the researcher undertook a facilitator's role, consequently empowering the nurses to comprehensively share their stories, while probing to seek for deeper meanings. Lastly, the researcher adopted the role of data analyst which included transcriber, coder, and content analyst (Creswell, 2009; de Vos *et al*., 2011). By meticulously following these roles, the researcher was able to truly capture the essence of the phenomenon under study. However, in order for the researcher not to be able to influence the nurses or be influenced, the researcher ensured to have thorough knowledge with regards to their objective or subjective ideology (Draper & Swift, 2010). As a result, the researcher assumed the role of an unprejudiced researcher extending themselves to be empathetic, but not emotionally involved.

Sampling/Participants

In this study a purposive homogeneous non-probability sampling technique was utilised, where participants were identified based on the particular purpose of the study (de Vos *et al*., 2011; Gerrish & Lacey, 2010; Grinnell & Unrau, 2008; Mack, Woodsong, Macqueen, Guest, & Namey, 2005). In other words, the participants were chosen, deliberately, on the basis of their unique personal characteristics, specific experiences of the phenomenon, their behaviour, and

their attitudes and beliefs, providing rich data, which answered the research questions and the explicit purpose (Borbasi & Jackson, 2012; Collingridge & Gantt, 2008; Marshall, 1996). In addition, the sample size also differed in terms of age, gender, and ethnic origin and the following criteria was implemented as a means to validate the purposive sampling technique:

- Participants were situated in Potchefstroom, North West Province, South Africa.
- Participants comprised of different ethnic groups (language, religion, age).
- Participants were willing to participate in in-depth interviews.
- Participants were willing to participate voluntary in the research and show openness towards the process.
- Participants were efficient in English or Afrikaans; good communication skills.
- Was registered with the South-African Nursing Council (SANC) as a professional nurse.

In terms of the sampling size, particularly with qualitative research, insufficient guidelines has been specified as to how many to select in order to reach the goals of the study (Marshall, Cardon, Poddar, & Fontenot, 2013; Patton, 2002; Sarantakos, 2000; Trotter, 2012). Several authors (Boulton & Fitzpatrick, 1997; Cleary, Horsfall, & Hayter, 2014; Dworkin, 2012; Pickler, 2007; Polkinghorne, 1989; Tuckett, 2004) has indicated that the sample size, within qualitative research studies, can be quite small, varying from 5 to 25 participants, which allows for an in-depth exploration of the phenomenon. However, it is essentially not necessary or practical to obtain data from every single individual, instead, the focus should be on determining how many individuals can adequately answer the research questions (Marshall, 1996; Marshall, Cardon, Poddar, & Fontenot, 2013).

Table 1 illustrates the characteristics of the participants.

Table 1

Characteristics of the participants (n = 9)

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	0	0
	Female	9	100
Age	20-30 years	2	22
	31-40 years	2	22
	40-50 years	0	0
	50-60 years	5	56
Area	North-West	7	78
	Gauteng	2	22
Ethnicity	White	2	22
	African	6	68
	Coloured	1	11
Household Situation	Single (Living alone, out campus residence)	1	11
	Married or living with partner	2	22
	Living with parents	2	22
	Divorced or separated	3	33
	Widowed	1	11
Qualification	Grade 12	1	11
	Technical Diploma	2	22
	Technical College Diploma	4	44
	University Degree	2	22
Home language	Afrikaans	3	33
	Setswana	5	56
	isiZulu	1	11

According to Table 1, the sample comprised of a voluntary sample of nursing students, where the majority of the participants (78%) were situated in the North-West Province and the other 22% (n = 2) of the sample were situated in the Gauteng Province. In terms of the age difference allocations, 56% (n = 5) of the employees were between the ages of 50-60 years, two of the participants were between the ages of 20-30 years, and the subsequent two participants were between 31-40 years of age. With regards to gender, 100% of the sample encompassed females. The majority of the participants were African (68%), 22% (n = 2) were of a white ethic origin,

whereas a mere one individual were from a coloured ethic origin. Specifically pertaining to the home language of the participants, 56% (*n* = 5) of the sample indicated to speak Setswana, one participant indicated to speak isiZulu, and lastly, 33% (*n* = 3) of the sample indicted their home language to be Afrikaans.

In terms of qualifications obtained by the participants, 44% (*n* = 4) of the sample obtained a Technical College Diploma, whereas two participants obtained a Technical Diploma. One participant indicated their highest qualification obtained to be Grade 12, and 22% (*n* = 2) of the sample obtained a University Degree. Lastly, with regards to the household situation, one participant is single, living alone, outside of campus residency, 22% (*n* = 2) of the participants were married or living with a partner, two is still living with their parents, three indicated to be divorced or separated, and only one widowed.

Data collection methods

The researcher applied the following copious techniques in order to collect the data.

Critical Incident Theory (CIT)

The CIT provided the rigorous method and information required to answer the particular research questions. The first use of the CIT in research dates back around 60 years as developed by Flanagan (1954). The purpose of this technique was to apply a set of procedures that allowed the researcher to collect vital information regarding the participant's behaviour, within a certain incident or experience, without being present during the occurrence of the actual behaviour (Flanagan, 1954; Kemppainen, 2000; Wertz *et al*., 2011). The focus of the CIT rests on the identification and exploration of the critical incidents or experiences that the participants face within the working environment that contributes either positively or negatively to the participants current predisposition (Bitner, Booms & Tetreault, 1990; Flanagan, 1954; Wertz *et al*., 2011). As such, Flanagan (1954, p. 335) defines an incident as "any observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act" and critical as "an incident must occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects". However, before

meaningful inferences, with regards to the critical incidents among nurses, can be made, the CIT procedures must be detailed to understand the necessity for the use of the CIT.

Particularly pertaining to the nursing environment, the use of the CIT has produced innumerable significant results, arguing the case for the use of the CIT within this particular study (see. Chua, Mackey, Ng, & Liaw, 2013; Gustafsson, Wennerholm, & Fridlund, 2010; Hosie, Agar, Lobb, Davidson, & Phillips, 2014; Kemppainen, 2000; Schluter, Seaton, & Chaboyer, 2008; Subramanian, Allcock, James, & Lathlean, 2011). The CIT procedures that the researcher followed is discussed as followed: Firstly, in-depth interviews (described below), was conducted, which enabled the participant to describe, in as much detail, the incident or experience, how the experience or incident affected them, and how they managed within that situation (Chell & Pittaway, 1998; Flanagan, 1954; Hosie *et al*., 2014). Secondly, the researcher decided upon the frame of reference of how the critical incidents is described/reported as well as the process of theme extraction and classification (Flanagan, 1954; Hosie *et al*., 2014; Neuhaus, 1996). Thirdly, the researcher identified data themes, which resulted in the identification of patterns affecting the phenomenon under study and lastly, a universal understanding or meaning of the phenomenon/critical incident was constructed, which is evidently the purpose of the CIT (Grove & Fisk, 1997; Irvine, Roberts, Tranter, Williams, & Jones, 2008; Kemppainen, 2000).

Pilot studies

The researcher ensured to conduct a pilot study prior to the commencement of the actual interview as a means to strengthen, justify, and asses the adequacy of the methodological procedures (Burns & Grove, 2009; Gerrish & Lacey, 2010; Moxham, 2012). Pilot studies are seen as crucial measures to ensure trustworthiness and legitimacy of the data collection techniques, especially within qualitative research (Byrne, 2001; Kim 2011). The particular motive for executing a pilot study can be accounted for the following reasons:

Firstly, due to the limited studies being conducted with regards to the use of the componential emotion approach within South Africa, the researcher found it challenging to sufficiently obtain previously renowned studies to support their case. Therefore, a pilot study needed to be executed to test the essence and feasibility of the theory within a South African environment.

Secondly, in order to avoid any bias intentions with regards to the research setting, the researcher conducted the pilot study to ascertain whether the chosen research setting (Potchefstroom) is sufficiently providing data that will allow the answering of the research questions. Consequently, if that was not the case, to be able to obtain information in other research settings (de Vos *et al*., 2011).

Thirdly, the pilot study enabled the researcher to identify distinctive trends prior to the actual interviews. Lastly, the researcher deemed it necessary to examine whether the interview questions and techniques utilised enabled the participants to provide information that will best match the motivation of the study as well as to test their understanding of the interview questions (Rous & McCormack, 2006). As a result, the researcher could adapt the nature of the research questions or obtain interview skills to acquire valuable information.

In-Depth Interviews

In-depth interviews were utilised as a means to collect data as this method is favoured, particularly, within phenomenological research studies (Creswell, 2009; Moustakas, 1994; Seidman, 2006). Specifically pertaining to the phenomenological paradigm utilised within this study, the sole purpose of this in-depth interview was to carefully reconnoitre the participants' experience, outlook, intention, and interest with regards to the phenomenon (Yeo *et al*., 2014). Also, the purpose was not to merely attain answers, but to intensively seek and describe the significant meaning they attach to the phenomenon and to understand why this specific phenomenon carries such immense importance in their lives (Dworkin, 2012; Patton, 2002; Seidman, 2006). In other words, to place oneself in the shoes of the participant as to enable the symbolic transferal of knowledge as pure and rich as can possible be attained.

Furthermore, this method of interviewing involved an informal, generative, and interactive process, whereby the researcher primarily focused their interview on asking two main research questions (Moustakas, 1994). As such, the following two research questions were asked:

- Please think back to the last, most recent emotion you experienced at work and consequently describe the situation as you experienced it?
- What were your emotional reactions within the situation?

Open-ended questions were utilised during the interview in order to evoke a comprehensive structural and textural account of the phenomenon as the participant experienced it (Moustakas, 1994; Patton, 2002). As a result, this enabled the researcher to compose a universal description of the phenomenon as desired by the researcher.

Field notes and Participant observation

During the interview, the researcher ensured to continuously take notes (also known as written accounts) as accurately and in as much detail as possible, whilst diverting their attention equally to attentively listen to the participant's story. This enabled the researcher to avoid overlooking crucial themes, viewpoints, and/or non-verbal expressions (such as taking too long to answer a question, being distant, losing focus while having to answer the questions, facial expressions) that, ultimately, forms a substantial part of the study (Babbie, 2007; de Vos *et al*., 2011). In addition, it also aided the researcher to remember significant statements or non-verbal expressions (e.g., facial expressions of the nurses) made during the interview which was deemed as important, especially for the reporting phase of the research. Lastly, participant observation was utilised as a technique which enabled the researcher to acquire the sensory, visual impressions and communications of the participants (Gilham, 2008). The purpose of observing the participants, within this study, was to take note of the facial expressions that they elucidated with regards to the motor expression component in accordance to the CEA.

Recording of data

To truthfully capture the significant essence of the phenomenon, the researcher utilised two methods of recording the data. Firstly, a digital voice-recorder was utilised to obtain the data during the definite interview (with verbal and written consent from participants) (de Vos *et al*., 2011; Silverman, 2013). Thereafter, transcript techniques was implemented to transcribe the recorded data into a Microsoft Word document, followed by transferal to a Microsoft Excel sheet after content analysis. To ensure that no information was passed over, the researcher listened to the voice-recordings for a second time.

As confidentiality is a vital component within research, the researcher took the responsibility to implement the following security tactics: (a) transferring the digital voice-recordings to a password-protected computer upon the completion of the interview and consequently deleting

the recordings from the digital voice-recorder; (b) safely storing the tangible documents (e.g., informed consent and biographical questionnaire); (c) storing the word and excel sheets in a password-protected location; (d) ensuring back-up copies, in case the original data is misplaced; and (e) implement participant anonymity practises.

Data analysis

The researcher utilised three main data analysis techniques which was combined into a singular process due to the fact that it best served the unique purpose and process of the study. The three techniques were as follows: Directed Content Analysis, Van Kaam's Modified Phenomenological Analysis (Moustakas, 1994), and Grid-based Componential Emotion Component Analysis (Fontaine, Scherer, & Soriano, 2013). In addition, a secondary data analysis technique was utilised, known as Critical Incident Technique analysis (Flanagan, 1954). Within this particular technique, the critical incidents were extracted and the coding "SD" was allocated to each statement. The three techniques are explained in isolation, followed by a combination of the techniques displayed in a step-by-step table.

Directed Content Analysis: Directed Content Analysis (DCA) is specifically used in research cases where an existing theory or model exist about the phenomenon, however, further investigation within a different context would yield beneficial results (Hsieh & Shannon, 2005). In other words, the purpose of utilising this technique within the study was to validate or extend the conceptual model or theory, known as Componential Emotion Approach, in a context not yet tested, as in South Africa. This technique is deemed more structured than conventional, whereby an existing theory or model is utilised in order to assign predetermined codings to the data analysis process (Graneheim & Lundman, 2003; Hickey & Kipping, 1996; Potter & Levine-Donnerstein, 1999). Within DCA, the transcribed interviews were immediately coded with the predetermined codes (see Grid-based Componential Emotion Component Analysis for coding scheme description). However, the data that couldn't be coded with the predetermined codes was discarded and not used as with DCA. In addition, evidence of previous studies justifies the use of this technique in nursing studies (e.g., Bradway *et al*., 2011; Guo, Sward, Beck, Wong, Staggers, & Frey, 2014; Jaarsma, Nikolova-Simons, & Van der Wal, 2012). Following the assignment of the predetermined codes to the transcribed interviews, the researcher advanced to the Modified Phenomenological Analysis.

Van Kaam's Modified Phenomenological Analysis: Van Kaam's Modified Phenomenological Analysis was utilised as adapted by Moustakas (1994). The essential purpose for using this technique was due to the researcher desiring to construct a textural (*what*) and structural (*how*) description, ensued by an eidetic (*universal*) profile as proposed above. Moustakas (1994) present the following steps:

1. Listing and Preliminary Grouping:

After coding the interviews with the predetermined codes, the researcher listed every expression and/or code relevant to the experience (CEA) in an excel sheet according to the CEA coding scheme.

2. Reduction and Elimination:

Each expression and/or meaning unit was tested against two requirements:

1. Does the meaning unit provide a level of understanding with regards to the experience of the phenomenon?
2. Is there a possibility of abstracting and labelling it? If yes, abstract and label. If not, eliminate. Also, vague and repetitive meaning units should be eliminated.

As a result, all the meaning units were tested to determine if it presented a significant understanding of the experience. The units was tested by means of utilising a co-researcher to check the coding's matched with each meaning unit prior to clustering. Changes and adaptations were made. Lastly, all the repetitive and vague meaning units were eliminated, leaving only the essential meaning units.

3. Clustering and Thematising the Invariant Constituents:

All the meaning codes that had the exact CEA code were clustered into the CEA coding scheme.

4. Final identification of the Invariant Constituents and Themes by application:

After the meaning units were clustered, in accordance to the CEA coding scheme, the transcribed interviews were checked again to ensure that the results are compatible with the coding scheme. Quality check was maintained by using a co-researcher to validate the coding scheme. Thereafter, each incident was given a sub category heading. All the sub-categories that were related was placed under a main heading.

5. Using the relevant, validated variant constituents and construct an individual textural description:

After the co-researchers validated the coding scheme, a table was constructed in order to attain a textural description of the data. This table included verbatim quotes of the participants. The critical incidents or experiences within the nursing environment were clustered into the textural table, followed by allocating main themes for the incidents as well as sub-themes.

6. Using the relevant, validated variant constituents and construct an individual structural description:

After the individual textural table was constructed, the researcher constructed several structural tables as in accordance to the CEA. In other words, each component of the CEA produced its own structural table.

7. Construct for each experience a textural-structural description of the meaning and essences, resulting in a eidetic profile of the CEA Phenomenon:

One eidetic profile was compiled including the textural and structural descriptions.

GRID-based Componential Emotion Component Analysis*:* Lastly, the Componential Emotion Component Analysis (CEA) was utilised for the predetermined coding scheme and coding scheme features selected. The component emotion approach, as mentioned previously, is characterised by a feature profile of specified emotion terms (Fontaine *et al*., 2013). However, the features of the GRID paradigm was utilised for each component of the CEA. The GRID describe the meaning of emotions according to the CEA. As a result, each subsystem of the CEA was given a codename as follows: Appraisal (AP), Subjective Feelings (SF), Bodily Sensations (BS), Action Tendencies (AT), Expressions (FEX: Facial expressions; VEX: Vocal Expressions). In addition, according to the GRID, each component comprises of features to describe the component and the features can be located within the literature review.

Strategies employed to ensure quality data

In order to ensure the trustworthiness within this particular research study, the researcher utilised Guba's (1981) model for assessing the rigour of the study. The researcher applied Krefting's (1991) interpretation of Guba's model as she conducted numerous studies to establish the reliability and validity of Guba's model. Compared to many other rigour models

(e.g., Kirk & Miller, 1986; Leininger, 1985), Guba's model is significantly favoured within the nursing environment, arguing the case of credibility for this study (Feitsma, 2005; Hegenbarth, Rawe, Murray, Arnaert, & Chambers-Evans, 2015; Tourangeau, Cummings, Cranley, Ferron, & Harvey, 2009). As such, Guba's model identifies four strategies in order to ensure the reliability and validity of the research: *credibility*, *transferability*, *dependability*, and *conformability*. The four strategies are described in detail as applied by the researcher.

Credibility: Credibility, *also known as truth value*, refers to the establishment of the truth within the findings (Krefting, 1991; Lincoln & Guba, 1985; Macnee & McCabe, 2008). In other words, the research findings represent the accurate and honest experience and perception of the phenomenon under study. As such, the essence of credibility relates itself back to the precise description and interpretation of the phenomenon as different individuals can relate and recognise the descriptions without being part of the study (Krefting, 1991). The researcher ensured credibility by employing the following strategies:

1. *Prolonged engagement within the field*: The researcher sufficiently submerged themselves in the research setting by extending themselves for a significant amount of time in order to gain the trust of the participants (Bitsch, 2005; Krefting, 1991; Onwuegbuzie & Leech, 2007). This involved to meet with the participants during a scheduled class (taking into consideration that permission was obtained prior to commencement of the class). The researcher compiled a presentation that addressed the purpose of the study, as well as the expected roles of the participants within the study. Following the presentation, sufficient time was allocated to address any concerns or questions. Furthermore, the researcher also provided the participants with an informed consent document indicating the purpose and their roles. The researcher gave the participants a week to decide on whether they would like to participate. After the week passed, the researcher went back to the participants to obtain all the informed consents. As a result of this process followed, numerous participants provided voluntarily consent to take part in the study and the researcher ensured to meet with them prior to interview commencement. Confirmation of interview appointments were done personally in order to strengthen the relationship and to ensure that the participants are on par with what is required of them. During the interview, a substantial amount of time was allowed for the participants to comprehensively verbalise their experience of the phenomenon. This enabled the researcher to gain a deeper and meaningful understanding of the core issues at hand. Therefore, in essence, the researcher

sufficiently made themselves available and known to the participants as to ensure a solid, meaningful, and supported relationship.

2. *Reflexivity*: One major aspect that can threaten credibility in a qualitative research study is the closeness and involvement of the relationship between the researcher and the participant that develops as a result of the prolonged engagement (Krefting, 1991; Mantzoukas, 2005; Marcus & Fischer, 1986; Polit & Beck, 2012). This is especially true for research studies including sensitive subjects/topics. Though, a close relationship is required in order for trust to be maintained, if it affects the ability of the researcher to interpret the findings, the involvement and relationship can be seen as more destructive. Therefore, the researcher ensured to continuously reflect on how their values, background, interests, and perceptions can influence the study (Pilnick & Swift, 2011). This may dictate how the researcher will interpret, describe, analyse, and present the findings (Agar, 1986). The researcher reflected by means of keeping a personal reflective journal of their feelings, thoughts, and ideas on the experience of the phenomenon (Bradbury-Jones & Finlay, 2002; Polit & Beck, 2012). In addition, concerns or challenges experienced during the study was also noted. After each interview, the researcher ensured to have a discussion, with a subject-related expert, on these ideas and challenges in order to overcome researcher bias. The expert provided the researcher with clearness of mind due to the fact that these issues and/or concerns were talked through and clarity of mind was obtained.

3. *Triangulation:* Triangulation refers to the utilisation and application of numerous research methods, sources, data, methodologies, or strategies as a means to data collection, which enables the researcher to sufficiently and comprehensively explore and/or describe the phenomenon (Casey & Murphy, 2009; Denzin 1989; Knafl & Breitmayer, 1989; Onwuegbuzie & Leech, 2007). As such, the researcher applied two triangulation strategies as to attain supporting evidence, to avoid biasness, and to cross-examine the truthfulness of the researcher (Denzin, 1989; Krefting, 1991; Tuckett, 2005): (a) methodological triangulation and (b) investigator triangulation. *Methodological triangulation* refers to the utilisation of different methods (e.g., interviews, participant observation, life histories) as to obtain data about the phenomenon (Barusch, Gringeri, & George, 2011; Denzin & Lincoln, 2005; Krefting, 1991; Lincoln & Guba, 1985). As a result, the researcher conducted numerous in-depth interviews, whilst observing the participants' non-verbal and verbal behaviour. In addition, the researcher ensured to complete field notes during

the interviews which involved the verbal and non-verbal descriptions as well as short ideas to reflect on. A short personal reflective journal was kept to dot ideas or challenges (Polit & Beck, 2012). Tape-recordings were also used. Furthermore, the researcher also made use of different research methods such as the critical incident theory (CIT) to obtain data, an adapted GRID instrument to validate the research findings, and content analysis to validate the content found. Secondly, *investigator triangulation*, refers to the utilisation of numerous triangulation expert researchers as suppose to a single researcher (Denzin 1989; Krefting, 1991; Anney, 2014). Therefore, following data transcription and coding, the researcher send the coded excel sheets to several researchers who were familiar with the research study and concepts. Their responsibility was to cross-check the data and to provide their inputs regarding the findings. Consequently, several meetings was held as to discuss the discrepancies between the researchers and to agree on the main themes and/or description of the phenomenon. In addition, to validate the researcher's interview skills as to obtain satisfactory data, the researcher extended themselves to an interview expert who, collaboratively, listened to some of the interviews and provided insight with regards to how to improve and how probing questions can be adapted. This ensured that the researcher was equipped as a successful interviewer.

4. *Peer examination*: Peer examination refers to the process of using impartial colleagues, who has experience with qualitative research and the subject field, to collaboratively cross-examine the research methods (e.g., data collection methods, process management, data analysis) and implicit data with the researcher. It is of the essence that the impartial colleagues provide their own understanding, interpretation, and insight with regards to the phenomenon and to discuss the possible changes and/or differences (Anney, 2014; Guba, 1981; Krefting, 1991; Lincoln & Guba, 1985). The researcher requested support and insight from several of their colleagues in order to improve on the quality of the findings. Furthermore, impartial peers who had no knowledge of the subject or research paradigm was also requested due to the fact that they can ascertain on whether the findings is presented in a meaningful, concise, and comprehensive manner. After the researcher coded the data and constructed the categorical table (according to the components), the documents were then send to the identified peers. A sufficient amount of time was allocated to them in order for them to provide their own interpretations and insight. Thereafter, several meetings was held to discuss the findings and agreement was attained on the findings.

Transferability: Transferability, *also known as applicability*, refers to the extent to which the findings of the research can be transferred to other contexts whereby meaning can be attached to the individuals not involved in the study (Bitsch, 2005; Houghton, Casey, Shaw, & Murphy, 2013; Krefting, 1991; Lincoln & Guba 1985). In other words, the findings can be interpreted as the equivalence of generalisability to the larger population and fit would be attained on the fact that other individuals can recognise the same experience without being present. However, it is of the utmost importance to sufficiently provide information on the participants and the research setting as to enable another prospective researcher to precisely conduct the same research in another setting and obtain comparable results. The researcher maintained transferability by means of the following:

1. *Provision of a thick description*: A thick description involves the procedure of elucidating all the steps concerning the methodological processes ranging from data collection to the final representation of the findings (Houghton *et al*., 2013; Krefting, 1991; Li, 2004; Lincoln & Guba, 1985). In addition, a thick description can also include an account of the context, the research methods utilised, and examples of the raw data as to enable readers to construct their own interpretations (Dawson, 2009). This enables other prospective researchers to replicate the exact study, within different settings. Therefore, as a measure to maintain transferability, the researcher sufficiently described the methodological processes above, and referral can be made to strategies employed to ensure quality data.
2. *Theoretical/Purposive Sampling*: Purposive sampling is a technique that is especially utilised in natural inquiry research studies due to the fact that the participants are selected based on a set criteria that can best answer the research questions. This enables the researcher to focus their attention on individuals who are particularly knowledgeable about the phenomenon and can provide rich and descriptive information on the phenomenon under investigation (Anney, 2014; Krefting, 1991; Teddlie & Yu, 2007). See to sampling and participants within the method section for an in-depth description.

Dependability: Dependability, *also known as consistency*, can be related to the consistency of the findings over similar conditions (Bitsch, 2005; Krefting, 1991; Polit & Beck, 2012). In other words, another researcher should be able to replicate the study, utilising the same methods, processes, theories, participants, and context, and be able to report the same type of results (Houghton, Casey, Shaw & Murphy, 2013; Koch, 2006). Dependability was maintained by the following strategies:

1. *Audit trail*: An audit trial encompasses the systematic procedure whereby the researcher presents an account pertaining to the conjectural, methodological, and critical processes followed in the qualitative research study (Anney, 2014; Bowen, 2009; Cope, 2014; Shenton, 2004). Schwandt (2001) refer to it as the "systematically maintained documentation system" (p. 8) which considers the examination of the inquiry strategies which were used to validate and authenticate the research findings. As such, the researcher elucidated all the steps, as described above, starting from data collection methods going through to the final description and interpretation of the findings. This comprehensive audit trial enabled the researcher to provide justified evidence (examples of raw data such as interview schedules, process notes) that the themes, concepts, ideas, and phenomenon descriptions are the mere product of the visible and verified data and not the researcher's own speculative proclivities (Koch, 1994; 2006; Lincoln & Guba, 1985).
2. *Stepwise replication*: With regards to stepwise replication, it is of the utmost importance to evaluate the qualitative research data by means of utilising two or more independent researchers that will serve as co-coders within the data analysis and interpretation phase (Anney, 2014; Guba, 1981; Guba & Lincoln, 1985). Their responsibility would be to analyse the data separately, interpret the findings, and subsequently compare the findings. Furthermore, communication between the researcher and co-researcher is vital as to address and cross-check developing insights as well as to discuss the consequent steps (Guba, 1981; Lincoln & Guba, 1985). Any discrepancies that arises during the process should swiftly be addressed as to avoid a sojourn in the process. As such, the researcher utilised two independent co-coders to analyse the data and to interpret the findings. It was requested of them to write a report on the findings. Consequently, a meeting was held to discuss and compare the findings. Any inconsistencies were then discussed during the meeting and as a final result, agreement was attained concluding the meeting. In addition, the co-researcher's report was correspondingly sent to the researcher's supervisor as to ensure credibility from a third point of view.
3. *Code-recode strategy*: Co-recode refers to the process of coding the data twofold, given a two or three week gestation period between each coding (Anney, 2014; Krefting, 1991). Therefore, the researcher firstly coded the data and consequently sent the data to an expert subject-related researcher in order to check the quality of the coding. Following a two week period, the data was coded for a second time and comparison techniques were applied to distinguish between any inconsistencies from the first coding period and reviews from the subject-related researcher. The researcher ensured to cross-check the changes made from

the subject-related expert and also compared them to the second coding phase. Final changes were made to the data, which were then sent to several subject and non-subject researcher in order to cross-check the data. This ensured that the data was consistently cross-checked for any mistakes, coding differences, and researcher biasness that might have occurred.

Conformability: Conformability, *neutrality in other words*, refers to the extent to which the researcher is able to provide findings that are exclusively represented by the participant's responses and/or data and no form of researcher biasness is evident, this includes the researcher's opinions or perspectives with regards to the research (Guba, 1981; Krefting, 1991; Polit & Beck, 2012; Tobin & Begley, 2004). It is particularly important to document the processes followed with regards to the execution of the research as to indicate the objectivity and significance of the research findings. Findings need to be established that is justified with data and therefore gives way to audibility. That is, an audit technique is utilised that considers not only the process followed, but also the data, findings, interpretations, and possible recommendations (Lincoln & Guba, 1985; Ryan-Nicholls & Will, 2009). As a result, conformability was maintained by the employing several strategies as explained above such as a reflective journal whereby the researcher documents personal reflections, an audit trail which indicate the exact processes followed with regards to the research, and triangulation techniques to document confirmations by other researchers and significance of utilising various techniques (Anney, 2014; Bowen, 2009; Lincoln & Guba, 1985).

Ethical Considerations

The researcher ensured to remain honest and respectful towards the participants, to ensure that the researcher is qualified and competent to execute the research, showing integrity and fairness at all times, and taking into consideration the rights and dignity of the participants. As such, the researcher ensured ethical principles be applied by means of the following ways:

Avoidance of harm: The researcher refrained from performing actions that may, in any way, harm the participants in a physical or emotional manner. As such, the researcher informed the participants of the possible dangers involved as to allow them to voluntarily participate in the research. A psychologist's contact details was made available should the participants require it (de Vos *et al*., 2011).

Informed consent: According to Grinnell and Unrau (2008) it is important to provide the participants with the opportunity to either take part in the study or intentionally decline. As such, the researcher fully informed the participants of the purpose, process, advantages, disadvantages, and credibility of the study. The participants were requested to complete an informed consent, which was kept safe and secure.

Voluntary participation: None of participants will be forced to participate in the study and therefore all the participants will be given the opportunity to participate voluntary. The participants, as indicated above, will have all the necessary information to make an informed decision as to whether to participate.

Violation of privacy and confidentiality: According to de Vos *et al*. (2011) every participant has the right to withhold information that might possible place them in an embarrassing or exposing situation. Therefore, the participants' identity was kept confidential and their documentation was kept in a safe location.

Deception: The researcher refrained from misleading, misinforming, or withholding information from the participants (Struwig & Stead, 2001). They fully informed the participants of what to expect (e.g., making of fieldnotes, voice recording, speaking about emotions).

Reporting

The findings of this study were reported in a qualitative writing style. Qualitative writing refers to a less-structured reporting style, which favours flexibility and openness when reporting the accurate descriptions of the participants. In addition, the reporting of the data may evolve into a more time-consuming and descriptive nature due to the fact that the researcher accumulates new insight during the study. As a result, the reporting is not seen as a single step to completion, but continuous steps involving in-depth writing and describing to capture the meticulous essence (de Vos *et al*., 2011; Leedy & Ormrod, 2005). The key purpose of this qualitative article was to accurately reflect and voice the participant's conscious opinions, perspectives, and understanding of the phenomenon under study and consequently to transfer this knowledge gained from the participants to a contributing and meaningful research article (de Vos *et al*.,

2011). The qualitative reporting style produces numerous benefits above quantitative as in the following ways (Creswell, 2007; Neuman & Kreuger, 2003):

1. There is immense richness in the data due to the integration of the participants' voice while reporting.
2. The narrative writing style increases the validity of the report as it brings personal, familiar, and approachable information into the report.
3. As qualitative reporting is exploratory, theory and knowledge development is nurtured and encouraged.
4. The reader can obtain a profound personal experience of the phenomenon under study as the reporting style induces existent feelings and experiences as from the participants' predisposition.

Findings

Results

The findings of this study followed a methodical approach which included a textural and structural. As such, the findings were prearranged into main categories, following sub-categories. The textural (Table 2) and structural (Table 3 to 7) descriptions are communicated in table format, which includes the main organisational category, the critical incident, the verbatim quotes, and lastly, the features for the GRID as described in the literature and method. Each table is placed on a separate page for special reasons.

Table 2

Categories of Critical Incidents with Situation Description Examples (n = 9)

Main Organisational Categories	**Critical Incident**	**Situation Description Examples *(Verbatim Quotes)***
POSITIVE EXPERIENCES		
Meaning at Work	Maternity Ward: Infant Delivery	"I am working in maternity ward"; "I see this new babies coming out"; "A woman she didn't know that she was going to have twins"; "The first baby came out and then the placenta came out": "Then I thought that no I was finished, then when I palpated again, you know, I felt there was something"; "I said no there is a second baby coming out"; "It was for the first time that I delivered twins"; "I delivered twins, unexpected twins"; "So those were my babies and you know I looked after them"; "The following day I even went there to see how they were doing, until they were discharged"
	Miracles	"Daar het 'n babatjie ingekom, hy was soos dood/*There came a baby to the hospital, he was like dead*"; "Ek die babatjie se hartjie, jy weet, net so bietjie gepulpeer, toe begin die babatjie asem haal/*I palpated the baby and then the baby started breathing again*"; "Toe het ons die babatjie reggekry/*We fixed the baby*"; "Naderhand is die babatjie in ICU, en toe lewe die babatjie/*Later the baby went to ICU, and it lived*"; "Ek het gedink soos ag grappie, speel bietjie hierso/*I thought it was a joke, let's play a bit*"; "Nee en toe ek begin babatjie suurstof gee en sy roep die suster/*No, then I gave the baby oxygen and she called the suster*"; "Toe kom die dr naderhand/*Then the Doctor came*"; "Hy is soos okay. Babatjie lewe en daar gaan die babatjie/*He is like okay the baby lives and there goes the baby*"; "Ek glo daai babatjie hardloop vandag vinnig hoor/*I believe that baby, today, runs fast hey*"
Job Satisfaction	Significance	"Pasiënt het ingekom, sy het gekom vir resultate van haar *condition*/*Patient came in for her results for her condition*"; "Sy het gekom vir haar HIV-toetse/*She came for her HIV Tests*"; "Toe ek haar resultate gaan kry, was die resultate goeie resultate gewees/*When I got her results, it was good results*"; "Dat sy so gelukkig was en so bly was /S*he was so happy and joyful*"; "Baie van die pasiente kom nie terug nie want hulle dink hulle gaan klaar doodgaan/*Many of the patients doensn't come back, because they think they are already going to die*"; "So dan kom hulle nie vir behandeling nie, al doen jy al die berading en alles/*Then they don't come for the treatments, even though you do the counselling and everything*"; "So jy probeer dit so gemaklik as moontlik vir hulle die boodskap oordra/*So you try as comfortable as possible to transfer the message*"; "Dadelik vir haar sê jy hoef oor niks te worry nie, jy is negatief/*Immediately told her she doent have to worry about anything, because she is negative*"; "Toe het ek net vir haar gesê hoe om dit te voorkom/*Just told her how to prevent it*"
NEGATIVE EXPERIENCES		
Occupational Health and Safety	Death	"In my eerste jaar was daar so een hier in Potch hospitaal/*In my first year there was this one in Potch hospital*"; "Ek en hy het die oggend gestry oor suiker, want hy het vir my gesê: Suster, jy sit nie genoeg suiker in my pap nie/*Him and I had an argument in the morning because he said: Suster, you don't put enough sugar in my pap*"; "Ek het gesê:.Bly stil. Jy kry kos/*I told him to keep quiet because he gets food*"; "Toe 'n paar ure daarna, is hy dood/*Then after a few hours he died*"; "Ek het soos 'n fight gehad. Hy het my naderhand begin vloek/*I had a fight with him, and then he started to swear at me*"; "Toe sê ek: Ek gaan jou nie terug vloek nie. Ek is professioneel/*Then I told him I am not going to swear back, I am professional*"; "Ons het ge-connect vir daai hele week/*We connected for that whole week*"; "Toe lag hy. Toe is hy dood/*He laughed, and then he died*"; "Dit is soos gaan. Dis verby/*It is like go, it is over*"; "Maar, soos jy sien nie daai persoon weer nie/*But like you don't ever see that person again*"
	Patient attacks	"Dit was my eerste aand van nagdiens/*It was my first night shift*"; "Hier het 'n pasiënt ingekom. Sit was uh psigiatriese pasiënt"/*There came in a patient, it was uh a psychiatric patient*"; "Hy het ingekom en hy het ons vasgedruk en ons gedreig om ons te vermoor of te

		verkrag/*He came in and pressed against us and threatened to kill or rape us*"; "Niks sekuriteit nie, ons kan niks doen nie/*No security, we can do nothing*"
	Needle Prick Injury	"I was in the ward with my colleague, a paediatric ward"; "So it was in the morning and we then were doing this, taking blood sugars, you know, from the babies"; "As soon as I finished, you know, I don't know what happened but I had a prick on my finger"; "I heard the needle pricking me, but there no blood coming out"; "So, fortunately, the mother came within that moment and then I asked her what was her status after she delivered that baby and then she told that no she was told that she was negative"; "I wonder is this baby, uhm, negative, HIV negative or what"; "I went to the sister in charge and then I asked her if I can go to casualty, you know, to go and, so that they can take my blood"; "They did this, you know, rapid test but it came out negative"; "They did say that they will take some blood so that they can be double sure"
		"Ek was al geprik in my vierde jaar/*I was pricked in my fourth year*"; "Ons het nagdiens gewerk/*We were working night shift*"; "Die vrou, maar ek het nie geweet wat was haar status of niks nie, want sy was nie my pasiënt nie/*The lady, but I did not know her status or anything as she was not my patient*"; "Ek moes dit in die driplyn insit, maar haar drip h*et al* begin terugstoot/*I had to put it in the drip, but the drip already started pushing back*"; "Die bloed was in die lyn, soos die drip was al leeg/*The blood was in the line, like the drip was already empty*"; "Ek het haar sommer met 'n pienk naald ingespuit/*I just injected her with a pink needle*"; "Ek weet nie wat gebeur nie maar ek laat val toe die doppie/*I don't know what happened, but I dropped the cap*"; "Ek weet nie wat nie, dit was seker reflex, en ek het so op die naald gedruk/*I don't know what, it was probably reflex, but I pushed on the needle*"; "Toe ek haar leêr oopmaak, toe sien ek sy is *stage 4*. Sy is soos, sy is op haar einde/*Then when I opened her file, I saw that she was stage 4, like she is near her end*"; "Sy is klaar. Toe kyk ons wat is haar viral load, dit is soos 24. Dit is soos, dit is bietjie hoog/*When she was finished, we looked at her viral load and it was 24, it was quite high*"; "Toe het ek gegaan ongevalle toe, en dan toets hulle jou/*Then I went to causalties to be tested*"; "Dit was die volgende oggend toe kan hulle eers vir my soos ARV's kry toe het ek dit begin drink/*It was the next morning when they could only give me the ARV's and I drank it*"
Organisational Best Practise	Hospital Procedural Guidelines	"There was a patient who came from outside and then the sister saw the patient and then apparently the patient was not treated according to the guideline"; "Did that VCT on that child"; "We are only testing adults, we have never tested a child who is less than eighteen months"; "Then the person said no I did the child VCT because the professional nurse who has a pillar told me that I should do VCT"; "So who am I to question what the professional nurse said"; "Then she kept on saying you know wena (Setswana expression meaning you) you are always not doing things and then you like pointing fingers, you are a fault finder"; "She is a very very diplomatic person, you know"; "But now she is turning it now"; "From there I walked out of that meeting"; "As a professional nurse at the clinic level, it is my duty to identify if people are doing things according to the guideline"; "Then she said I am a fault finder"; "So I think if you are working together, I watch your back, you watch my back";
	Staff Training and Development	"Remember our nursing education, there were no computers, everything we did, we did it in writing"; "I don't know how to operate a computer"; "I must submit a report"; "Now I know how to write a report, they don't want it, they want it typing, not written with your hand"; "Now I remember one day there was something- winter school about computer, they refused me to go"; "My senior refused me to go"; "There is a lady here, she is a cleaner, general assistant, she knows computer, how to write and everything"; "Please I have written it please type it and submit it to the matron"; "Because when I take her from her work her workload remains with her partner"; "Let me just tell you about that one, when my supervisor, I have already completed the form, now the leave form now she had to sign it, and then she tell me oh you know this is on a clinic day and you know without you, no I cannot release you on a clinic day"
	Performance Management	"At work I have done wellness counselling"; "They said come there is an interview, I didn't even know whether they are interviews or what"; "They will say no I failed the interview"; "Ninety or ninety percent of the time I am left with the department"; "I run the department full time, with or without the doctor"; "It doesn't matter whether there is a Dr. or not I function without the Dr"; "As long as I go anywhere and say sign where a Dr. is needed"; "But still they take other people from outside and said I must teach them"; "I said no my position is coming"; "She doesn't want to promote me"; "Our government for auditing, she won't tell me that about it"; "Busy consulting the patients and then I just hear from her come telephonically"; "When I come, auditors are here, she has prepared maybe two weeks

		back about the auditing, but she doesn't tell me"; "Then from there she tell me no I didn't do one, two, three"; "The same thing she has ticked on there, interview"
	Racial Discrimination	"Ek het soos, die patient/*I have this patient*"; "Sal jy nou vir hulle sê: Okay nou waar is hulle lêers/*Then I will ask them where is their file*"; "Hulle wou nie hê dat ek hulle moet help nie, want ek is nou wit/*They don't want me to help them because I am white*"; "Dan is jy soos, okay fine sit, sit. Ek het die hele dag/*Then I am like okay fine sit, I have the whole day*"; "Dan ewe skielik kom hulle in jou kamer in/*Then all of a sudden they come into your room*"; "Nee suster, ek wag nou so lank vir jou/*No suster, I wait so long for you*"; "Dan sê ek soos, maar ek het jou nou net vir jou leêr gevra/*Then I am like I just asked you for your file"*
	Unethical Practises	"So maybe this time she was fighting for, she wanted me to give the patients, or the clients the frozen hepatitis"; "So I said to her, no I am not going to give this frozen hepatitis because the book that I read said the vaccine if it has frozen, it is no more not good to be used"; "So when she was not on duty, went for a symposium or whatever, I took the vaccines back to the pharmacy and all the expired drugs"; "The sister said I shouldn't discard it because they are still white and green"; "So you wanting me to use this and it was the boxes were not right, so I said no, I am not going to use it"; "So the other day something happened again that I exploded, then I said no why you are used to this and this and this"
	Conflict Management	"I have a couple of situations with management"; "I started in October"; "They never backdated me on my, uhm, housing allowance"; "Now I have queried it"; "Now they have lots of issues and normally saying anything about anything"; "Person will tell you I follow it up"; "When they hear staff is coming late, uhm, this one absent, they are quick for those things and make you sign papers"; "Because you come to work, you don't know anyone here"; "So I tell you know what I feel and think"
		"Last week we were at a meeting"; "I am the provincial manager for the North-West team"; "One of the sub-ordinates came in late in a meeting"; "She, she came in and, you know with a negative attitude"; "As I went home I wrote her an email saying you know I didn't like your attitude coming late to a meeting"; "Don't even ask permission, you want to go out, and buy whatever you wanted to buy"; "She responded saying, you know, very rudely"; "she responded saying you know she will do if she, what must she do if she is hungry"; "So this morning I received an email from our manager now who says he wants to see us"; "I even wrote, a sent, an email to my manager asking her what is the meeting about"; "They know what the meeting , obviously they spoke about this and they know what the meeting is about"; "He never responded"; "As I go to Joburg, I will meet with him"; "We all need to know the, the communication, how do we go about"; "You don't just jump"

Table 2 indicates the critical incidents or events (also known as emotional episodes) as experienced among the nine nursing participants that took part in the study. This refers to what they typically experience within the nursing environment. Results pertaining to the data analysis process reported four main categories and several subcategories. Regarding the four main categories, two categories produced results that illustrated a positive connotation, whereas the subsequent two a negative connotation.

Meaning and Job satisfaction

Results pertaining to the positive connotation produced two main categories that were labelled Meaning at Work and Job Satisfaction. Meaning at work can be seen as a positive encounter which may contribute to feelings of personal accomplishment and a sense of fulfilment. Positive incidents such as delivering babies and witnessing miracles were reported to bring meaning into the nurses' working environment. With reference to delivering babies, it is evident that encountering an infant delivery process is not something they take for granted, but rather treasure as they ensure that their patients are well taken care for, for instance: "*So those were my babies and you know I looked after them*". As a result of the meaningful experience, they will even go beyond their call of duty to truly convey the characteristics of a caregiver "*The following day I even went there to see how they were doing, until they were discharged*".

Witnessing miracles, on the other hand, can refer to situations in which an extraordinary event is witnessed, welcoming divine intervention. In other words, an unusual event "*Daar het 'n babatjie ingekom, hy was soos dood/There came a baby to the hospital, he was like dead*" with favourable consequences "*toe begin die babatjie asem haal /the baby started breathing again*" has occurred which is not comprehensible by natural or scientific laws. To nurses, witnessing miracles is an immensely significant part of their work as they get to experience unexpected or odd situations which may make them question the forces of a higher power and the simple act of a moral code of doing good. Furthermore, miracles happening within their work environment can happen in an instance, which may contribute to meaning for the nurses as they did not expect or anticipate such favourable outcomes, for example "*Hy is soos okay babatjie lewe en daar gaan die babatjie/He is like okay the baby lives and there goes the baby*" and "*Ek glo daai babatjie hardloop vandag vinnig hoor/I believe that baby, today, runs fast hey*".

Secondly, **Job Satisfaction**, can be described as feeling satisfied within the nursing environment due to contributing to the patient's welfare and health goals. Significance, for nurses, refers to those typical situations which significantly impact their lives due to the outcome of a specific event, which was meant to be detrimental "*Sy het gekom vir haar HIV toetse/She came for her HIV Tests*". To them, witnessing a patient experiencing happy and joyful feelings due to obtaining good HIV results is significant as they know that many patients do not seem to experience the process as positive. Verbatim quotes such as "*Dat sy so gelukkig was en so bly was/She was so happy and joyful*" and "*Baie van die pasiënte kom nie terug nie want hulle dink hulle gaan klaar doodgaan/Many of the patients doesn't come back, because they think they are already going to die*" reflect this statement.

Occupational Health and Safety

Conversely, nurses reported incidents which they experience more negatively and undesirably. With regard to the negative experience of the nursing environment, two main categories were extracted, namely Occupational Health and Safety and Organisational Best Practise issues. *Occupational health and safety* issues can be seen as situations which threaten the physical and/or psychological health and safety of the nurses. Three incidents were reported that were seen to be threatening to their health and safety, namely: death, attacks from patients, and injuries on duty such as needle pricking.

Death, from a nursing participant's point of view, can be seen as an incident during which there is a permanent cessation of the patient's lifecycle. This may cause a very traumatic experience within the nurses as they have connected themselves emotionally to the patients "*Ons het ge-connect vir daai hele week/We connected for that whole week*", and yet the patient's life is terminated in an instance "*Toe lag hy, toe is hy dood/He laughed, and then he died*". Furthermore, they have to deal with the aftermath of the patient's death, knowing that they will never see that person again, even though they might think the person is going to a better place. To them it may seem incomprehensible due to the fact that they were still connected to that patient a few minutes ago and higher power decided it is finished "*Dit is soos gaan dis verby*/*It is like go, it is over*".

Attacks from patients also portrayed a negative experience as the nurse's life was threatened, not only psychologically manner, but also physically. Physical threatening in the sense that the

patient physically tried to inhibit the nurse's ability to escape "*hy het ons vasgedruk/he pinned us down*" and psychologically threatening them with inappropriate gestures, such as "*ons gedreig om ons te vermoor of te verkrag/threatened to kill or rape us*". Gestures as such can or might induce psychological trauma, due to the fact that the nurses are unable to protect themselves "*Niks sekuriteit nie, ons kan niks doen nie/No security, we can do nothing*".

Lastly, nurses reported injuries at work, such as **needles pricking** them, as being occupationally unsafe. Needle-prick injuries can be seen as an occupational hazard due to the fact that it physically harms the nurse whereby transferal of blood occurs via a medicinal instrument "*Ek weet nie wat nie, dit was seker refleks, en ek het so op die naald gedruk/I don't know what, it was probably reflex, but I pushed on the needle*". There is a possibility that the nurses' conditions of life can change as a result of the injury, due to the patient's condition, for example "*Toe ek haar lêer oopmaak toe sien ek sy is stage 4, sy is soos sy is op haar einde/Then when I opened her file, I saw that she was stage 4, like she is near her end*" or "*I wonder is this baby, uhm, negative, HIV negative or what*".

Organisational Best Practise

The latter main category, Organisational Best Practise, can be described as strategies and activities which best contribute to the organisation's performance and goals, yet maintaining a moral and ethical approach to business, which includes people management. From a negative perspective, actions are taken that are incongruent to the organisation's goals and values. The following incidents pertain to organisational best practise: hospital procedural guidelines, staff training and development, performance management, racial discrimination, unethical practises, and conflict management.

Nurses reported incidents pertaining to **Hospital procedural guidelines**, which refers to activities incongruent with the correct organisational procedures "*There was a patient who came from outside and then the sister saw the patient and then apparently the patient was not treated according to the guideline*". Nurses are also challenged by the fact that they are unable to confront those who are not following procedures "*So who am I to question what the professional nurse said*" and are also criticised for behaving in an ethical manner "*Then she kept on saying you know wena (Setswana expression meaning you) you are always not doing things and then you like pointing fingers, you are a fault finder*".

Staff training and development challenges and incidents were also reported by nurses. Staff training and development typically refers to initiatives whereby individuals desire to improve on their current skills and competencies. However, nurses reported this positive initiative as a negative experience for them, due to the fact that they are unable to improve as a result of management not wanting to release them for such activities "*Now I remember one day there was something, winter school about computer, they refused me to go*". As a result, they have to rely on other employees to execute those responsibilities that require additional skills "*There is a lady here, she is a cleaner, general assistant, she knows computer, how to write and everything*", consequently limiting these employees to complete their own work "*Because when I take her from her work her workload remains with her partner*".

Performance management is seen as an organisational strategy that aligns the organisation's goals and objectives to the employees' roles and responsibilities, which includes promotional opportunities for employees. As such, nurses reported that they contribute more than their responsibility framework stipulates "*I run the department full time, with or without the doctor*", are being asked to attend interviews for promotional reasons "*They said come there is an interview, I didn't even know whether they are interviews or what*", yet are still rejected or denied "*She doesn't want to promote me*". This is deemed negative from the nurse's point of view due to the fact that they have to train the newcomers, while receiving no additional effort from the organisation.

Racial discrimination, on the other hand, can be typically described as being treated less favourably due to racial or ethnic origin. In the case of nurses, they are, on a consistent basis, confronted with racial disparities, where the patients are unwilling to be treated by the nurse "*Hulle nou nie hê dat ek hulle moet help nie, want ek is nou wit/They don't want me to help them because I am white*". As a result, the nurses have to wait to help the patients, which may impede their working performance.

Nurses are also challenged by incidents within the nursing environment, described as **Unethical Practices**. Unethical practices can be described as situations or actions that are not morally correct or appropriate. Within the nurses' case, it was expected of them to act unmorally "*So maybe this time she was fighting for, she wanted me to give the patients, or the clients the frozen hepatitis*", which caused them to express undesirable behaviour "*So the other*

day something happened again that I exploded, then I said no why you are used to this and this and this".

Lastly, **Conflict management** was reported by nurses as a negative incident. Conflict management can be described as an incident whereby a disagreement or argument has occurred as a result of conflicting interests or values. Nurses reported conflict with both management "*I have a couple of situations with management*" and subordinates "*One of the subordinates came in late in a meeting*", "*She, she came in and, you know with a negative attitude*". As a result of this conflict, adverse feelings or responses were evoked causing the nurses to act in a negative manner "*So I tell you know what I feel and think*".

Table 3

Categories of Critical Incidents with associated Appraisal component (n = 9)

Main Organisational Categories	**Critical Incident**	**Appraisals Examples *(Verbatim Quotes)***	**Appraisal Feature**
POSITIVE EXPERIENCES			
Meaning at Work	Maternity Ward: Infant Delivery	"So we thought that it was one baby"; "It was for the first time that I delivered twins"; "I delivered twins, unexpected twins"	• Unpredictable. • Inconsistent with expectations.
		"I felt that, you know, I am a midwife"; "He gave me this with a purpose"; "Then I just say, you know, it is so amazing how God did this"; "I feel that this is my calling"	• In itself pleasant for the person. • Important and relevant for person's goals.
	Miracles	"Ek en my vriendin het eendag iets awesome gedoen/*My friend and I did something awesome oneday*"; "Dis soos awesome vir my/*It's like awesome to me*"	• In itself pleasant for the person.
		"Ek glo ek maak 'n verkil/*I believe I am making a difference*"; "Ek voel ek moet hier wees/*I feel I must be here*"; "Ek voel ek het my deel gedoen/*I feel I did my part*"	• Important and relevant for person's goals.
Job Satisfaction	Significance	"...ek 'n positiewe effek op haar gehad het/*I had a positive effect on her*"	• Consequences positive for somebody else.
		"Dit maak my meer positief om te weet dat hulle gaan nou meer versigtig wees om dit nou nie te kry nie/*It makes me more positive to know that they will be more cautious not to get it*"; "Vir my gaan dit oor om elke oggend op te staan en ek kan 'n doel hê/For me it is to stand up and know I have a purpose";	• In itself pleasant for the person.
		"Dat ons nie weet hoe die pasiënt dit opvat nie/*We don't know how the patient will react*"	• Unpredictable.
NEGATIVE EXPERIENCES			
Occupational Health and Safety	Death	"Toe is hy dood en ek is soos, ja dit is *real life*/*Then he is dead and I am like this is real life*"	• Consequences able to live with.
		"Soos ek dink God bepaal alles, verstaan, soos iemand kan doodgaan en jy kan hom nie eers help nie/*Like I think God determines everything, understand, like someone can die and you cannot even help him*"	• Irrevocable loss.
		"Jy kan nie glo dat uhm, dit gebeur voor jou nie/*You cannot believe that uhm it happens right in front of you*"	• Unpredictable.
		"Dis vir jou nogals sensitief/*It is quite sensitive for you*"	• In itself unpleasant for the person.
	Patient attacks	"Dit was vir my baie. Jy weet nie wat om te doen nie/*It was a lot for me, you don't know what to do*"; "Ons is in hierdie plek, niks sekuriteit, niks nie/*We are in this place, no security, nothing*"; "Ons kan niks doen nie/*We can do nothing*"; "So, dit was 'n moeilike situasie/*So it was a difficult situation*"	• In itself unpleasant for the person.
		"Dit gaan 'n negatiewe impak hê oor jou werk/*It's going to have a negative impact on your work*"; "So jy het nie rêrig 'n lewe nie/*So you don't really have a life*"	• Consequences negative for person.
	Needle Prick Injury	"I wasn't satisfied"; "I was in like a dilemma"; "It is very stressful"	• In itself unpleasant for the person. • Incongruent with own standards and ideals.
		"I have never pricked myself because I usually don't recap"; "It happened very quick"; "I don't know, it happened in the wink on an eye"	• Suddenly.
		"So what came into my mind it was just this issue of HIV"; "If they are positive, you know, it is obvious that I will also be positive"	• Consequences negative for person.
		"What am I going to do now"	• Unpredictable.
		"It was my fault"; "It was neg, sort of negligent"	• Caused by persons own behaviour.
		"Toe sê ek vir hulle ek gaan vigs kry; ek kots alles uit/*I told them I am going to get AIDS because I vomit everything out*"; "Hierso is jy. Jy probeer ander mense help en jy mors jou eie lewe op/*You try to help people and you mess up your own life*"; "Ja dan is jy soos, ek gaan dalk nie kinders kan kry nie/*Then you are like I might not even have children one day*"	• Consequences negative for person.
		"Ja jy verstaan jou hele lewe kan verander. Dit is soos, so vinnig/*You understand, your whole life can change, it is so quick*"	• Suddenly.

		"Toe doen ek die domste ding/*I did the stupidest thing*"; "Toe ek druk was dit soos, ag nee/*When I pressed, it was like ag no*";	• Caused by persons own behaviour.
Organisational Best Practise	Hospital Procedural Guidelines	"There are a lot of things that are not going according to the way they are supposed to go"; "I told them it means that you don't know the guideline that you are working under"	• Violated laws or socially accepted norms.
		"For me it was useless"; "I didn't want to talk to that lady"; "Is she having a problem with me"; "In a way, I helped them, though I got this abuse"; "I think I retaliated instead"; "So if you are going to call me a fault finder, it is fine"; "Do your mistakes, do whatever"; "So that is not a good working relationship"; "I don't like that kind of relationship"	• Incongruent with own standards and ideals. • Consequences negative for person. • In itself unpleasant for the person.
	Staff Training and Development	"I can't type so I end up doing nothing"; "Secondly, I don't have money to go to Vusalela to register for computer again"; "That was one way to upgrade myself"; "This can't go on like this"; "How can I bring my side now"; "I can't go after hours"; "This is an opportunity for me at least"; "Even if it is one finger but I will learn from this"	• Important and relevant for person's goals.
		"To me I feel like I am the weakest link"	• In itself unpleasant for the person.
		"That one day this problem will be over"; "Even if it doesn't get over, it is okay"; "It is my problems, I need to face them"; "I don't care when God will answer strongly on this"	• Consequences able to live with.
		"Best what I could do and I have done nobody anything"; "I feel like I am wasting time"; "I have wasted already money"	• Treated unjustly.
	Performance Management	"Like if I want something I can't get it"	• Incongruent with own standards and ideals.
		"I think there it is just those people that plays"	• Caused by somebody else's behaviour.
		"When I compare these things I don't see any difference to me"; "Things are bad"; "There it is a problem"; "But I hope it will be okay"; "There is so much I can't finish now"	• In itself unpleasant for the person.
	Racial Discrimination	"Dan *snap* jy/*Then you snap*"	• Suddenly.
		"Soos hierdie "*come serve"*. Hulle misbruik jou, hulle maak jou klaar/*Like this comserve, they use you, they finish you*"; "Ek voel net jy doen alles en die ander sit net en "chill" en tee/*I feel I do everything and the others just sit there and chill and tea*"; "Maar hulle is baie rasisties soos die *staff* ook/*They are very racist, like the staff too*"	• Caused by somebody else's behaviour. • Inconsistent with expectations.
		"Dan voel ek, ag hoekom het jy ooit vandag werk toe gegaan/*Then I feel like why did I come to work today*"; "Ja, die is nou nie my favourite ding nie/*Yes this is not my favourite thing*"; "Daar is nie rêrig iets positiefs nie/*There isn't much positive*"; "Dis klein goedjies, maar dit bou op/*Its small things, but it builds up*"	• In itself unpleasant for the person.
	Unethical Practises	"I feel like they don't take their stuff serious"; "I feel like it is just being brushed aside"; "The minute you walk out the door it is like ag man"	• Incongruent with own standards and ideals.
		"When you feeling like that, you become so reluctant"; "You are not emotionally attached to any one of them"; "The relationship is strictly professional"	• Important and relevant for persons goals.
		"Why is this person hurting me so much"; "So I don't want that"	• In itself unpleasant for the person.
		"I am going to do what I think it is right for me"	• Important and relevant for persons goals.
		"It is a false image that they are giving out"; "Every other nonsense surrounding the staff that has something to do with the staff, they are quick to attend to those things"; "Not like representing the staff"; "The other day you said I shouldn't tell the patient that she is HIV"	• Caused by somebody else's behaviour.
	Conflict Management	"But what I have realised with the supervisors, sometimes they are the ones who create problems for the nurses"	• Caused by somebody else's behaviour.
		"Yes it is not good"; "Those are embarrassing things" "When we are working bedside nursing, it is better"; "Now when you are working in the office, eish (Setswana expression- Interjection), it is not nice"; "It is no more good"	• In itself unpleasant for the person.
		"I can't be working in such a situation"	• Incongruent with own standards and ideals.
		"I am struggling to get approval"	• Incongruent with own standards and ideals
		"I exploded"	• Caused by persons own behaviour.
		"I didn't like your attitude coming late to a meeting"; "She responded saying, you know very rudely"; "I have to think about it"; "It was stuff we could have solved"	• Inconsistent with expectations. • Caused by somebody else's behaviour.

Table 3 represents the first component of the CEA, known as appraisal. An appraisal can be seen as the subjective evaluation of an event based on the individual's goals, needs and values. Results as follows:

Meaning at work and Job satisfaction

Nurses delivering babies typically appraised the incident as unpredictable and inconsistent with their expectations due to the fact that they did not anticipate this particular outcome "*so we thought that it was one baby*". In addition, the nurses also considered this particular incident as pleasant for them and attribute the consequences of this incident as important and relevant for their goals "*I feel that this is my calling*". Nurses witnessing miracles also appraised the situation as pleasant "*It's like awesome to me*". They considered the particular incident as important and relevant for their goals "*I believe I am making a difference*". Considering the nurses level of job satisfaction, nurses appraised this particular incident as unpredictable for them because they often do not anticipate the patient's reaction "*We don't know how the patient will react*". In addition, the nurses appraised this particular incident as pleasant "*It makes me more positive to know that they will be more cautious not to get it*".

Occupational Health and Safety

With regard to the negative experiences within the nursing environment, features were selected that best represented the appraisal examples and will be described as follows. In terms of Death, Patient Attacks, and Needle-prick Injuries, which represents Occupational Health and Safety, one identical feature were evident, known as "In itself unpleasant for the person". Appraisal features such as "Consequences able to live with" and "Irrevocable loss" were present at Death. In addition, the appraisal feature of "Unpredictable" were shared among Death and Needle-prick Injury. Patient Attacks, moreover, also shared an alike feature to that of Needle-prick Injuries, recognised as "Consequences negative for person". The last subcategory for Occupational Health and Safety, Needle-prick Injuries, shared very similar appraisal features to Death and Patient Attacks which were mentioned. However, several other features were selected for Needle-prick Injury appraisal examples, namely: "Incongruent with own standards and ideals", "Suddenly", and "Caused by person's own behaviour".

Organisational Best Practise

Lastly, appraisal features for Organisational Best Practise were selected and differentiated for each of the subcategories. With regard to Hospital Procedural Guidelines, appraisal features such as “Violated laws or socially accepted norms”, “Incongruent with own standards and ideals”, “Consequences negative for person”, and “In itself unpleasant for the person” were evident. The latter feature were also present at all the subsequent subcategories. For Staff Training and Development, in addition to the shared feature, three supplementary features were evident and are described as “Important and relevant for person’s goals”, “Consequences able to live with”, and “Treated unjustly”. Appraisal features such as “Incongruent with own standards and ideals” and “Caused by somebody else’s behaviour” were selected for Performance Management as it best represented the appraisal examples. “Caused by somebody else’s behaviour” is an appraisal shared among Performance Management and Racial Discrimination. In addition, two other appraisal features were selected for Racial Discrimination and were “Suddenly” and “Inconsistent with expectations”.

With regard to the last two subcategories, two appraisal features were shared among Unethical practises and Conflict Management. The features were slected as “Caused by somebody else’s behaviour” and “Incongruent with own standards and ideals”. One additional appraisal feature were evident at Unethical Practises known as “Important and relevant for person’s goals”. With regard to Conflict Management, three additional features were present as it best represented the appraisal examples. They were selected as “Caused by person’s own behaviour”, “Inconsistent with expectations”, and “Caused by somebody else’s behaviour”.

Table 4

Categories of Critical Incidents with associated Subjective Feelings component (n = 9)

Main Organisational Categories	**Critical Incident**	**Subjective Feeling Examples *(Verbatim Quotes)***	**Subjective Feeling Feature**	**Emotion Words**
POSITIVE EXPERIENCES				
Meaning at Work	Maternity Ward: Infant Delivery	"Overwhelmed" "Excitement"	• Felt energetic	"Happy" "Happiness"
	Miracles	"Ek voel goed/*I feel good*" "Voel beter/*Felt better*"	• Felt good	None reported
		"Opgewonde/*Excited*"	• Felt energetic	
Job Satisfaction	Significance	"Goed voel/*Feel good*"	• Felt good	"Gelukkig/*Happy*" "Geniet/*Enjoy*"
		"Positief/*Positive*"	• Felt positive	
		"Geduldig/*Patience*"	• Felt calm	
NEGATIVE EXPERIENCES				
Occupational Health and Safety	Death	"Voel toe nou sleg/*Felt bad*"	• Felt bad	None reported
		"Negatiwiteit/*Negativity*"	• Felt negative	
	Patient Attacks	"Skrikkerig/*Frightening*" "Bang/*Wary*"	• Felt nervous	"Vrees/*Fear*" "Kwaad/*Anger*"
	Needle Prick Injury	"Toe voel ek nie lekker nie/*Then I didn't feel well*"	• Felt bad.	"Vies/*Angry*"
		None reported	-	"Worried" "Scared" "Fear" "Angry" "Stressful" "Unhappy"
Organisational Best Practise	Hospital Procedural Guidelines	None reported	-	"Angry"
	Staff Training and Development	"Felt lost"	• Felt out of control	"Sad" "Upset" "Stress" "Anger" "Bitter"
		"Afraid"	• Felt nervous	
		"Frustrated"	• Felt powerless	
	Performance Management	"I feel betrayed"	• Felt out of control	"Cross" "Surprised" "Angry"
		'Not going to feel good"	• Felt bad	
	Racial Discrimination	"Voel nie lekker nie/*Feel unwell*"; "Net Vrydag, ek was die hele	• Felt bad	"Woended/*Rage*" "Kwaad/*Anger*" "Haat/*Hate*"
		dag negatief/*Just Friday, I was negative the whole day*"	• Felt negative	
		"Gefrustreerd/Frustrated"	• Felt powerless.	
	Unethical Practises	"Not fine"	• Felt bad	None reported
	Conflict Management	"Feel bad"	• Felt bad	"Angry" "Bitter" "Disappointed"
		None reported	-	"Angry"

Table 4 represents the typical subjective feelings (second component of the CEA) nurses experience within the various critical incidents. However, differentiations occur between the concept of emotion and feeling and therefore it was deemed important to distinguish within the table, but also to report on both. Findings are documented as follows.

Meaning at work and Job satisfaction

Working in the maternity ward produced positive emotions such as “Happy” and “Happiness” and they reported to feel energetic as based on being “Overwhelmed”. Witnessing miracles did not report on any emotions. However, the nurse felt good and energetic as a result of being able to save a baby’s life. The nurse felt “Excited” as they know it was due to their work that the baby is alive. Lastly, the nurses who are satisfied within the work they do reported positive emotions such as being “Gelukkig/Happy” and “Geniet/Enjoy”. In addition, they felt good, positive, and calm as a result of the outcome of the event.

Occupational Health and Safety

Occupational Health and Safety, with its subcategories produced results in order for feature selection to commence. Death and Patient Attacks produced identical subjective feeling features, whereas Needle-prick Injuries and Patient Attacks share similar emotion words. With regard to Death, no emotion words were reported, but two subjective feeling features could be selected, for example “Felt bad” and “Felt negative”. One feature could be selected for Patient Attacks and is termed “Felt nervous”. The emotion words reported were “Vrees/Fear” and “Kwaad/Anger”. Needle-prick Injuries, on the other hand, exhibit various emotion words, but only one subjective feeling feature. The feature selected “Felt bad”. The emotion words that accompanied Needle-prick Injuries were “Vies/Annoyed”, “Worried”, “Scared”, “Fear”, “Angry”, “Stressful”, and “Unhappy”.

Organisational Best Practice

Lastly, Organisational Best Practice, also reported several subjective feeling features and emotion words. With regard to Hospital Procedural Guidelines, no subjective feeling feature was selected due to verbatim quotes not being reported. Also, only one emotion word was present, namely “Angry”. Staff Training and Development produced results wherefore three

features could be selected. The features were “Felt out of control”, “Felt nervous”, and “Felt powerless”. Five emotion words were evident, identified as “Sad”, “Upset”, “Stress”, “Anger”, and “Bitter”. Performance Management produced one feature and one emotion word identical to Staff Training and Development. They were “Felt out of control” and “Angry”. In addition. “Felt bad” were selected as the subjective feelings feature, followed by “Cross” and “Surprised” as the emotion words.

In addition, Racial Discrimination produced result for which three features could be selected. They were “Felt bad”, “Felt negative”, and “Felt powerless”. Three emotion words accompanied Racial Discrimination which were “Woedend/Rage”, “Kwaad/Anger”, and “Haat/Hate”. Unethical Practices and Conflict Management shared the same subjective feeling feature as Racial Discrimination and was “Felt bad”. No emotion words were reported for Unethical Practices. Lastly, Conflict Management reported “Bitter”, “Angry”, and “Disappointed” as the typical emotion words.

Table 5

Categories of Critical Incidents with associated Action Tendency component (n = 9)

Main Organisational Categories	**Critical Incident**	**Behavioural Tendency Example** ***(Verbatim Quotes)***	**Action Tendency Feature**
POSITIVE EXPERIENCES			
Meaning at Work	Maternity Ward: Infant Delivery	"I just wanted to take a photo with this kids, you know, so that I can even show them to my family"	• Felt an urge to be active, to do something, anything.
		"I want to be with this kids and take a photo with them"	• Wanted to be near or close to people or things.
	Miracles	"Ek wil huil/*I want to cry*"	• Wanted to act, whatever action it might be.
Job Satisfaction	Significance	"Wat ek wou doen eintlik, ek wou eers vir haar die berading doen/*What I actually wanted to do, I wanted to counsel her*"; "Ek wou eers vir haar gesê het wel, sy moenie dit negatief ervaar nie of so iets nie/*I wanted to tell her well she mustn't experience it as negative or something like that*"	• Wanted to tackle the situation. • Wanted to take initiative her/himself.
NEGATIVE EXPERIENCES			
Occupational Health and Safety	Death	None reported	-
	Patient attacks	"Ek wou vir hom vasdruk en uitgooi/*I wanted to press back and throw him out*"	• Wanted to keep or push things away.
		"Ons het gevoel ons wil hom net plat druk en hom net spuit dat hy net kalmeer/*We felt like to press him down and to inject him so that he can calm down*"	• Wanted to take initiative her/himself. • Wanted to tackle the situation.
	Needle Prick Injury	"I just wanted to, you know, to know if I, if the baby is fine"; "I wanted to know their status"; "So I just wanted to say to confirm that these ones they say negative"	• Wanted to tackle the situation.
		"Soos naald uitgeruk, ek wil dit uitgekry het/Took needle out, *I wanted to get it out*"	• Wanted to take initiative her/himself. • Wanted to tackle the situation.
Organisational Best Practise	Hospital Procedural Guidelines	"I wanted to tell her where to get off"	• Wanted to damage, hit, or say something that hurts. • Wanted to oppose.
		"I wanted to tell that person that, you know, she was not doing what she did that day for a first time"; "So I wanted to ask her, do you have a problem with me?"; "I wanted to have clarity on that"; "So I wanted to ask her that straight to the point"	• Wanted to tackle the situation. • Wanted to act, whatever action it might be.
	Staff Training and Development	"I wanted to go there and I wanted to put a day leave in"; "Now for me it was I wanted to uplift myself at least to know the basics";	• Wanted to take initative her/himself. • Wanted to take action, whatever action it might be.
		"I can hit that wall"; "If I can stand longer there, my, maybe I will hit somebody"	• Wanted to damage, hit, or say something that hurts.
	Performance Management	"I wanted to resign"	• Wanted to take initiative her/himself. • Wanted to act, whatever action it might be.
	Racial Discrimination	"Ek wil weghardloop/*I want to run away*"	• Wanted to run away in whatever direction.
	Unethical Practises	"I wanted to go out of the department"	• Wanted to take initiative her/himself. • Wanted to act, whatever action it might be.
	Conflict Management	"I wanted to leave"	• Wanted to take initiative her/himself. • Wanted to act, whatever action it might be.
		"I wanted to call her to order"; "I wanted to call her to shout at her"; "I wanted to speak my mind out"	• Wanted to do damage, hit, or say something that hurts. • Wanted to oppose.

Table 5 exhibits the third CEA component, referred to as Action Tendencies. Action tendencies can be described as the motivational force displayed by the readiness to engage in action in order to adapt to the environmental circumstances. Results are documented as follows:

Meaning at work and Job satisfaction

Within positive encounters such as witnessing the birth of unexpected babies, the nurse felt inclined to do something, to be active in doing something, and in this instance, the nurse reported that they wanted to "*take a photo with this kids*". In the event of witnessing miracles, they reported a propensity to take action, any type of action, which in this case was wanting to cry. This may be due to witnessing such a life-changing event. Regarding the notion of being satisfied at work, prior to the nurse communicating the HIV results to the patient, they firstly felt inclined to tackle the situation and take initiative by, for example, counselling and comforting the patient.

Occupational Health and Safety

With regard to Death, unfortunately the participant did not report any action tendencies and therefore no features could be allocated. The nurse, who was confronted with a patient attacking them, felt the propensity to tackle the situation by feeling inclined to keep or push the patient away, which also signifies that the nurse wanted to take initiative. This is particularly relevant as the nurse's life was in danger and she therefore felt propelled to get back into a safety zone by pushing the patient away "*Ek wou vir hom vasdruk en uitgooi/I wanted to press back and throw him out*". Lastly, the nurse reported, during a needle-prick incident at work, to take initiative and to tackle the situation not only for themselves but also for the patient. For example, "*Soos naald uitgeruk, ek wil dit uitgekry het/Took needle out, I wanted to get it out*" and "*I just wanted to, you know, to know if I, if the baby is fine*".

Organisational Best Practice

In addition, **Organisational Best Practice**, was able to account for results in which features could be selected for all six subheadings. According to the result table, a significant overlap in terms of the features selected were evident for the six categories. As such, Hospital Procedural Guidelines and Staff Training and Development share two identical features, namely "Wanted

to damage, hit, or say something that hurts" and "Wanted to act, whatever action it might be". In addition to the shared feature, *Hospital Procedural Guidelines* produced results and two action tendency features were selected. They are described as "Wanted to tackle the situation" and "Wanted to oppose". The latter feature is also present in Conflict Management. *Staff Training and Development*, *Performance Management*, and *Unethical Practises*, likewise, share one feature, known as "Wanted to take initiative her/himself". *Racial Discrimination* revealed a feature not present at any of the subsequent five categories. The feature that best represented Racial Discrimination were "Wanted to run away in whatever direction". Lastly, overlap for *Conflict Management* also occurred with regard to the following features "Wanted to take initiative her/himself", "Wanted to act, whatever action it might be", and "Wanted to do damage, hit, or say something that hurts".

Table 6

Categories of Critical Incidents with associated Expression component (n = 9)

Main Organisational Categories	Critical Incident	Expressions (Facial & Voice) *(Verbatim Quotes)*	Facial Expression Features	Vocal Expression Features
POSITIVE EXPERIENCES				
Meaning at Work	Maternity Ward: Infant Delivery	"I was speaking very loud (VEX)"		Increased the volume of voice.
		"I said Yeah (VEX)"		Produced a short utterance.
		"Smiles all over you know (FEX)"	Smiled.	
	Miracles	"Gehuil/*Cried* (FEX)"	Showed tears.	
		"Ons kan soos baie liefde in ons *face* wys/*We can show a lot of love in our faces* (FEX)"	Uncategorised facial expression.	
		"Jou oë *smile*/*Your eyes smile* (FEX)"	Uncategorised facial expression: eyemovement.	
		"Jy sal net soos kyk/*You will just like look* (FEX)"	Uncategorised facial expression: eyemovement.	
		"*Smile* die hele tyd/*Smile the whole time* (FEX)"	Smiled.	
Job Satisfaction	Significance	"Ek glimlag vir hulle/*I smile at them* (FEX)"	Smiled.	
		"Ek frons/*I frown* (FEX)"	Frown.	
		"Ek gluur jou aan/*I stare* (FEX)"	Uncategorised facial expression: eyemovement.	
		"Gewoonlik 'n teken van my oë/*Normally a sign of my eyes* (FEX)"	Uncategorised facial expression: eyemovement.	
		"Ek sê vir jou reguit/*I tell you straight* (VEX)"		Had an assertive voice.
NEGATIVE EXPERIENCES				
Occupational Health and Safety	Death	"Dit gee my trane/*It gives me tears* (FEX)"	Showed tears.	
	Patient attacks	"Baie praterig/*Very talkative* (VEX)"		Uncategorised vocal expression: increased vocal words.
		"Baie huilerig/*Crying* (FEX)"	Showed tears.	
		"Dan ek nie die persoon direk in die oë kyk nie/*Then I cannot look the person in the eyes* (FEX)"	Uncategorised facial expression: eyemovement.	
		"Dan sal ek wegkyk/*Then I will look away* (FEX)"	Uncategorised facial expression: eyemovement.	
	Needle Prick Injury	"Frowning (FEX)"	Frowned.	
		"I was like oops (VEX)"; "I was like phew (VEX)"; "My voice changed, I said ooh (VEX)"; "I said *ai*"		Produced a short utterance.
		"Ek het my oë uitgehuil/*Cried my eyes out* (FEX)"	Showed tears.	
		"Nervous voice (VEX)"		Had a trembling voice.
		"I was just saying it out (VEX)"; "Dan ek soos hmmm/*I am like hmmm* (VEX)"		Produced a short utternance.

		"Sy is positief, toe is ek soos, toe lag ek dit af/*She was positive and then I laughed it off* (VEX)"		Produced speech disturbances.
Organisational Best Practise	Hospital Procedural Guidelines	"I said Oh really (VEX)"; "I said no man (VEX)"		Produced a short utterance.
		"I couldn't even speak English (VEX)"; "I can only speak Tswana (VEX)"		Changed the melody of voice.
		"It changed to uhm somebody who is like afraid (VEX)"		Had a trembling voice.
	Staff Training and Development	"Now I cried out (FEX)"; "Tears will flow down (FEX)"	Showed tears.	
		"Now with me, I normally look down (FEX)"	Uncategorised facial expression: eyemovement.	
		"Like grinding on my teeth (FEX)"	Uncategorised facial expression: lip movement.	
	Performance Management	"I can speak loud (VEX)"; "I shouted the whole place (VEX)"		Increased the volume of voice.
	Racial Discrimination	"Dan sal ek skree/*Then I will shout* (VEX)"; "Lelike goed sê, maar soos onderlangs/*Say mean things, but like subliminally* (VEX)"		Produced speech disturbances.
		"Maar ek sal vir hulle graag sê/*I will tell them easily*"; "Dan sê ek. Kom hierso/*Then I say come here (VEX)*"		Had an assertive voice.
		"Rol my oë/*Roll my eyes* (FEX)"; "Ek trek net my oë *funny* vir jou/*I pull my eyes in a funny manner* (FEX)"; "'n *nurse* kan baie goeie vuil kyk gee/*a Nurse can give a dirty look* (FEX)"	Uncategorised facial expression: eyemovement.	
	Unethical Practises	"I frown (FEX)"	Frowned.	
		"Cry (FEX)"	Showed tears.	
		"Laugh (VEX)"		Produced speech disturbances.
		"I make my voice thick (VEX)"		Changed the melody of voice.
	Conflict Management	"Frown (FEX)"	Frowned.	
		"I just looked at her (FEX)"	Uncategorised facial expression: eyemovement.	
		"I frown (FEX)"	Frowned.	
		"Kept quiet (VEX)"		Fell silent.
		"High pitched voice (VEX)"		Increased the volume of voice.

TO NOTE:

VEX: Vocal Expression

FEX: Facial Expression

Table 6 embodies the fourth CEA component, known as the Expression component. The expression component can be divided into two subcategories: Facial expressions (FEX) and Vocal expressions (VEX). Results are documented as follows.

Meaning at work and Job satisfaction

Nurses expressed their emotions in various facial and vocal expressions due to the positive side of nursing. Nurses working in the maternity ward reported to smile as a result of the experience of delivering babies. They also spoke in a louder voice, which can be attributed to their excitement or feeling joyful. In addition, words seem to surpass their mind as they reported to produce short utterances such as "*Yeah*". Miracles are also experienced by nurses on a daily basis. As such, they reported to show their overwhelming feelings by crying, yet also smiling. In some instances, the nurse was not able to fully describe a Grid-based facial expression (e.g., "*Jou oë smile/Your eyes smile*") and therefore the findings identified a unique facial expression such as the nurse communicating their emotions through their eyes. Unfortunately, no vocal expressions were reported for witnessing miracles. Nurses who report to be satisfied within their jobs, reported to smile during events in which patients' health outcomes were good and the patient was joyful, which caused them to be satisfied with their jobs. As for witnessing miracles, they also communicated their emotions through their eyes "*Gewoonlik 'n teken van my oë/Normally a sign of my eyes*". In terms of reporting how their voice changed during such instances, they reported to speak in an assertive voice, which can ultimately come across as being confident in helping the patient.

Occupational Health and Safety

During situations which threatened the physical or psychological health and safety of nurses, for example, witnessing death, they reported to shed tears. However, they did not report any changes in their voice as they spoke, which may be attributed to their shock. Attacks from patients evoked tears within the nurses. They also showed their emotions through their eyes for example looking away "*Dan ek nie die persoon direk in die oë kyk nie/Then I cannot look the person in the eyes*". As a result of being involved in a situation over which they had no control, they reported a unique finding such as increasing their vocal words. This can be attributed to the nurse trying to stabilise the situation as using a lot of words to catch the patient's attention. Lastly, when experiencing injuries at work such as needle-prick injuries, the nurse reported to

have frowned and also to have cried. As with situations in the maternity ward, words also seem to surpass their minds by producing a short utterance "*I said ai*".

Organisational Best Practice

As nurses are confronted with incidents at work in which hospital guidelines were not followed, the nurse reported to change the melody of their voice. In other words, the incident caused them to speak in their native language "*I can only speak Tswana*". In addition, they spoke in a trembling voice, where words seem to surpass their minds in which they produced short utterances "*I said Oh really*". Unfortunately, no facial expressions were reported by the nurse. Regarding incidents that are deemed inadequate staff training and development opportunities, the nurse did not report any vocal changes. However, in such situations tears were evoked and two unique findings were reported. The first unique finding was presented as a facial expression of eye movement, where the nurse was unable to look another individual in the eye, but looks away "*Now with me, I normally look down*". The subsequent unique category was presented as a movement of the lips "*Like grinding on my teeth*". Challenges with performance management strategies evoked nurses to increase their voice by "*I shouted the whole place*". Inappropriate racial remarks evoked the nurse to speak in an assertive voice "*Dan sê ek. Kom hierso/Then I say come here*", yet also produced speech disturbances such as "*Lelike goed sê, maar soos onderlangs/Say mean things, but like subliminally*". In addition, as with hospital procedural guidelines, a unique facial expression of the eye movement was reported "*Rol my oë/Roll my eyes*". Unethical practices caused the nurse to frown and shed tears as facial expressions. However, regarding the changes in their voice, interestingly, they produced a speech disturbance such as "*Laugh*" and changed the melody of their voice by making their voice "*Thick*". Lastly, when nurses are confronted with conflict situations, they showed their dissatisfaction by frowning and eye movement changes "*I just looked at her*". Regarding the changes in their voice, they increased the volume of their voice by speaking in a "*High-pitched voice*", yet also didn't want to produce any vocal cues by "*Fell silent*".

Table 7

Categories of Critical Incidents with associated Physiological Changes component (n = 9)

Main Organisational Categories	**Critical Incident**	**Physiological Changes Examples** *(Verbatim Quotes)*	**Physiological Change Features**
POSITIVE EXPERIENCES			
Meaning at Work	Maternity Ward: Infant Delivery	"I felt, you know, very comfortable"	Muscles relaxing (whole body).
		"Warm"	Felt warm.
	Miracles	"Soos kalm/*Like calm*"	Muscles relaxing (whole body).
		"Sit gemakliker/*Sit more comfortable*"	Muscles relaxing (whole body).
Job Satisfaction	Significance	"Meer ontspanne/*More comfortable*"	Muscles relaxing (whole body).
NEGATIVE EXPERIENCES			
Occupational Health and Safety	Death	"Jy skrik wakker/*You get a fright*"	Muscles tensing (whole body).
	Patient attacks	"Op daardie oomblik het jy so *numb* gevoel/*On that very moment you feel numb*"	Felt weak limbs.
		"Alles gaan so dood/*Everything goes dead*"	Felt weak limbs.
		"Jy kry daai gevoel van soos, jy haal asem maar jy moet asem haal/*You get this feeling of breathing but still you need to breathe*"	A Lump in throat.
	Needle Prick Injury	"I felt like cold"	Felt cold.
		"I had this goose flesh"	Felt shivers.
		"Like so uncomfortable"	Muscles tensing (whole body).
		"Jy skrik jou alie af/G*ot a fright*"	Felt shivers. Muscles tensing (whole body).
		"Ek kots alles op/*I vomit everything out"*	Had stomach problems.
Organisational Best Practise	Hospital Procedural Guidelines	"So I was like full inside"	Muscles tensing (whole body).
		"I was kind of not relaxed"	Muscles tensing (whole body).
	Staff Training and Development	"I am swallowing down"	A lump in throat.
		"Even if I drink water, I can't swallow the water"	A lump in throat.
		"It is like my throat, after swallowing, that bitterness, it is like thick and then you force it down your throat"	A lump in throat.
		"Cold"; "My hands were get cold"	Felt cold.
		"My body will start to shiver"	Felt shivers.
	Performance Management	"Like maybe headache"	Uncategorised bodily sensation: Headache.
	Racial Discrimination	"My ledemate teen my lyf hou/*Hold my limbs against my body*"; "Hulle tense my/*They tense me*"	Muscles tensing (whole body).
	Unethical Practises	None reported.	-
	Conflict Management	"Blood pumps very actively"; "Blood flow"	Uncategorised boduly sensation.
		"Normally I get palpitations"	Heartbeat getting faster.
		"Yeah I get like a knot here you know, knot in stomach"	Had stomach troubles.

Table 7 characterises the typical physiological changes (fifth CEA component) that can occur among nurses within different critical incidents as a means to express their emotions. Results are documented as follows:

Meaning and Job satisfaction

The events of delivering babies and witnessing miracles evoked a relaxing physical sensation within the nurses, which one can assume is the result of experiencing pleasant moments. During that particular incident, nurses reported that they felt their muscles relaxing throughout their whole body, y*et al*so feeling warmth around them. In terms of incidents where nurses feel satisfied within their job, due to significant patient feedback, they reported that they felt their muscles relaxing throughout their whole body.

Occupational Health and Safety

Nurses report that when exposed to incidents such as death and needle-prick injuries, their muscles were tense throughout their whole body. In addition, regarding needle-prick injuries, nurses reported that their limbs felt weak and they also had a lump in their throat. Patient attacks, on the other hand, shared the physiological changes of their muscles tensing up with the other two, however also reported that they felt their bodies were cold, had shivers, and lastly, had gastrointestinal challenges. In summary, due to the exposure to unpleasant situations, the nurses' autonomic nervous system produced unpleasant sensations and occurrences as a sign to feel discomfort.

Organisational Best Practise

Conversely, being exposed to incidents such as hospital procedural guidelines not being followed and racism remarks from others, they reported to experience a tense feeling of their muscles. Unfortunately, nurses did not report any physiological occurrences when confronted with unethical dilemmas. Nurses reported that when they heard that they weren't allowed to pursue additional training and development opportunities or were not granted those opportunities, they felt their bodies going cold, they had shivers, and felt a lump in their throat. However, as nurses attached a negative connotation to performance management strategies, they produced a unique physiological change in the form of headaches. Lastly, incidents in

which conflict was evoked, provoked nurses' heart to beat faster and they had gastrointestinal problems.

Discussion

Outline of the findings

The main objective of this research study was to firstly explore the situation-specific emotional episodes (known as critical incidents) experienced among nurses and, secondly, to describe how nurses experience the subsequent components regarding the componential emotion approach. This particular project is an extension of previous projects conducted within the South African context and takes into consideration the synchronised dynamic process with regards to all the five components (e.g., appraisals, subjective feelings, motor expressions, action tendencies, and physiological occurrences). The findings will be discussed based on each research objective. Lastly, limitation, recommendations, and a conclusion will be provided.

The *first specific objective of this study* was to conceptualise the componential emotion approach according to the literature (Scherer, 2001; 2005). In short, the componential emotional approach can be seen as an integrative framework that instigates the meaning of emotions. As from the CEA, an emotion can be defined as "*as an episode of interrelated, synchronized changes in the states of all or most of the five organismic subsystems in response to the evaluation of an external or internal stimulus event as relevant to major concerns of the organism*" (Scherer, 1982; 2001). The five organismic substrates refers to (a) *appraisals* which signifies the cognitive evaluation of an event in terms of four appraisal checks; (b) *subjective feelings*, referring to an awareness of an emotion process to follow; (c) *motor expressions*, constituent of facial and vocal expressions; (d) *bodily sensations*, which is characterised by autonomic nervous system changes as a result of an emotion being elicited; and (e) *action tendencies*, which refers to the motivational force that drives human behaviour.

The *second specific objective of this study* was to explore the situation-specific emotional episodes among nurses. Results pertaining to this research study identified several situation-specific emotional episodes that could be categorised firstly under organisational outcome terms (e.g., meaning at work, job satisfaction, occupational health and safety, and organisational best practice), and secondly as the positive and negative experiences within the

nursing environment. Results will be reported in terms of the positive and negative experiences respectively.

Positive experiences

Regarding the positive experiences within the nursing environment, two organisational outcomes were identified, known as meaning at work and job satisfaction. Evidence related to these outcomes that can be described by situations such as delivering babies, witnessing miracles, and acknowledging the patients experiencing a significant event. This study's findings pertaining to nurses' job satisfaction as a contributor to positive experiences within the nursing environment were supported by Atefi *et al*. (2014) and others (Cortese, 2007; Ravari, Bazargan, Vanaki, & Mirzaei, 2012). They asserted that nurses are most satisfied within their job when making a difference in the patients' lives and taking care of them (Castaneda & Scanlan, 2014). Stuart, Jarvis, and Daniel (2008) further reported that witnessing positive outcomes within patients (e.g., patients coming back for health-giving, and patients expressing joyful feelings as a result of caring) as well as a positive working climate (Klopper, Coetzee, Pretorius, & Bester, 2012; Meeusen, van Dam, Brown-Mahoney, van Zundert, & Knape, 2011; Van Bogaert, Clarke, Willems, & Mondelaers, 2013) can be seen as significant contributors to job satisfaction. Moreover, due to nurses experiencing their jobs as satisfying, they were able to respond in a compassionate manner to the patients which, ultimately, encourages a supportive environment for the patients (Lilius, Kanov, Dutton, Worline, & Maitlis, 2011). These findings supports Cingel (2011) findings that it is of the utmost importance to remove any barriers that may hinder the provision of quality care by means of expressing compassion. As a result, the patients are more willing to return for additional care giving.

Attaching meaning with their work was also identified by nurses to be important and as contributing to their positive experiences, especially in the maternity ward department, and witnessing miracles. As a result of having meaning within their work, they also indicated a willing attitude to extent themselves beyond their current roles and responsibilities, which is typically attributed as a "calling". In other words, due to the fact that they feel they are being called to this profession, they evidently acknowledge the positive experiences which they consider as meaningful. Dik and Duffy (2009) and others (Hunt, 2009; Pavlish & Hunt, 2012) concur with the above findings, specifically pertaining to meaning within the nursing

environment. They add that nurses reported several meaningful moments within their professional lives, such as having a connection with patients and being able to contribute to the patient's health improvement (e.g., patient living after being dead). In addition, nurses reported these meaningful moments as "*never forgotten*" moments, which resulted in positive feelings about their job and the organisation (Pavlish & Hunt, 2012, p. 118). Positive feelings towards the organisation was reported as the nurses extending themselves to execute responsibilities beyond their framework, also known as organisational citizenship behaviour, and being fully engaged with their patients (Lilius *et al*., 2011; Mathumbu & Dodd, 2013). As a result, Pavlish and Hunt (2012) and others (Podsakoff, MacKenzie, Paine, & Bachrach, 2000) supported these findings by stating that due to nurses experiencing meaning at work, they are more willing to walk the extra mile for their patients (e.g., ensuring the patient is well taken care of till discharge) and are more engaged within their work (Chalofsky & Krishna, 2009). These findings were also supported in the current study.

Negative experiences

Within this study, nurses reported several incidents that caused them to perceive the nursing environment as negative and stressful. Occupational health and safety incidents, such as needle prick injuries on duty, patients attacking the nurses, and losing patients were reported by nurses. In addition, the nurses also reported incidents related to organisational best practise encounters, which can be described as: nurses not following the correct organisational protocols, being unable to further develop themselves for the benefit of the organisation, promotional and role clarity discrepancies, being exposed to racial discrimination remarks, unethical dilemmas being witnessed, and conflict that arose due to incongruent values in the working environment.

Occupational health and safety challenges can be seen as threatening to the nurses' physical and/or psychological health and safety, which, consequently, impedes their ability to provide quality care (Geiger-Brown & Lipscomb, 2011). Findings pertaining to the occupational health and safety dilemmas being faced among nurses are supported by several studies (e.g., *death*: Pattison, Carr, Turnock, & Dolan, 2013; Zheng, Guo, Dong, & Owens, 2015: *patient violence*: Alameddine, Mourad, & Dimassi, 2015; Arnetz, Hamblin, Essenmacher, Upfal, Ager, & Luborsky, 2015: *needle prick injuries*: Yeshitila, Mengistie, Demessie, & Godana, 2015). Furthermore, Hogan, Fothergill-Bourbonnais, Brajtman, Phillips and Wilson (2015) asserted that the nursing profession is deemed as emotionally intense (confirmed within this study),

equated with negative incidents which places the nurses in a vulnerable position. As a result, they end up dealing with psychological trauma (e.g., panic attacks at work, feeling they didn't care enough, they should have done more to help the patients, self-efficacy belief challenges, fear for the profession and of the patients) (Geiger-Brown & Lipscomb, 2011; Sloand, Ho, Klimmek, Pho, & Kub, 2012) and physical trauma (e.g., negative effects of the antiretroviral treatment due to needle prick injuries) (Chan & Huak, 2004; Laposa, Alden, & Fullerton, 2003; Mealer, Shelton, Berg, Rothbaum, & Moss, 2007; Wykes & Whittington, 1998).

Another critical incident encountered by nurses was deemed as organisational best practise challenges. Organisational best practises can be described as a set of guidelines, ethics, or strategies that represents the most sufficient course of action in obtaining the best required results (Investopedia, 2015). In the case of nursing, it is seen as the guidelines and strategies pertaining to the promotion and maintenance of excellent nursing care (Keller, Strohschein, & Schaffer, 2011). However, findings in this particular study indicated a negative connotation towards nursing best practises. In other words, several strategies which should be deemed as aiding nurses in ensuring and promoting the best care giving within the nursing environment are characterised as negative tactics for nurses. For example, nurses reported that the organisation is unwilling to provide them with the necessary training and development opportunities, as well as career progression opportunities, which, evidently, affects their perception of the job and the organisation (e.g., discourages job satisfaction and encourages employee turnover) (Flinkman, Laine, Leino-Kilpia, Hasselhorn, & Salanterä, 2008; McCabe & Garavan 2008; Trinchero, Brunetto, & Borgonovi, 2013). As nurses are guided by ethical guidelines and statutory councils, one would not assume unethical practices and nurses not following the correct guidelines taking place within such a strict-monitored environment. However, this is not the case as reported by the nurses within this study and also found within other studies (Bickhoff, Sinclair, & Levett-Jones, 2015; Fayez *et al*., 2013; Turkmen & Savaser, 2015). As a result of having to deal with this ethical conflicting situation, they reported being less productive, frustrated, and wanting to leave the health profession (Aleassa & Zurigat, 2014; Hart, 2005; McCabe & Sambrook, 2013; Nafei, 2015). The health care environment should encourage a supportive environment, yet results found in this study report otherwise. This is due to conflict challenges between nurses and their colleagues/managers. Nurses reported that it is not the patients that evoke conflict but the professionals within the organisation (Jackson *et al*., 2010; MacKusick & Minick, 2010; Wright, Mohr, & Sinclair, 2013), leading the nurses to be unable to perform their working responsibilities (Benin,

Borgstrom, Jenq, Roumanis, & Horwitz, 2012). Kim, Nicotera and Mcnulty (2015) and Brinkert (2010) reported that conflict is especially due to communication misunderstandings which was also found within this study. Lastly, nurses also face discrimination, not only from their own colleagues, but also from patients (Allan, Cowie, & Smith, 2009; Larsen, 2007; Likupe, Baxter, Jogi, & Archibong, 2014; Wheeler, Foster, & Hepburn, 2014). Larsen (2007) and Hagey, Choudhry, Guruge, Turrittin, Collins, and Lee (2004) asserted that discrimination on nurses affect their confidence in providing quality care, their motivation to attain their professional goals, and their overall quality of life.

The *third specific objective of this study* was to determine how the appraisal component of the CEA is experienced among nurses in accordance to the different situation-specific emotional episodes. Results pertaining to the appraisal component of the componential emotion approach were evident within the nursing environment. As mentioned previously, an appraisal can be described as the evaluation process of an event in the form of certain appraisal checks whereby the implications serves as a background of the individuals personal goals, needs, and values (Fontaine *et al*., 2013; Scherer, 1996; 1999; 2001). As such, this study indicated several appraisals that are evident for the negative and positive events.

Positive experiences

Results indicated that when nurses reflect on positive events (in this instance, delivering of new-borns, witnessing miracles, and observing positive health outcomes within nurses) within the nursing environment, they are more prone to appraise these typical conditions as pleasant or desirable (Ablett & Jones, 2007; Nobahar, Ahmadi, Alhani, & Khoshknab, 2013; Piredda *et al*., 2015; Pruchno, 1990). They also reported to evaluate situations as unpredictable, in the sense that the outcomes or consequences within the situation were not consistent with what they expected (e.g., delivering unexpected twin babies) (Gunther & Thomas, 2006). However, Atkinson, Atkinson, Smith, and Bem (1993) asserted that unpredictable events is deemed as more stressful than experiencing predictable events. Also, due to their actions within caregiving, the consequences on the patients were of a favourable, positive nature (e.g., patients provided positive feedback) (Newton, Kelly, Kremser, Jolly, & Billett, 2009; Rognstad, Nortvedt, & Aasland, 2004). Lastly, as an appraisal is seen as the evaluation consequences of needs, goals, and values, the findings prevail that the nature of the events can be deemed as contributing to their goals; in other words, the appraisal checks lead to the nurses appraising

the event as important, y*et al*so relevant to their goals (White, 1996). Ablett and Jones (2007) supported this findings by indicating that nurses seek to be in this profession, taking care of people, thus leading them to be more committed to their patients and also experience personal satisfaction. In other words, their subjective evaluation of the typical events that occur within the nursing environment are deemed as supporting their goal attainment. Evidence is provided that positive appraisals, within a nursing context, leads to higher physical and psychological quality of life in nurses, role confidence, long-lasting satisfaction and joy within the environment, and continuous feelings of pleasure (Lawton, Moss, Kleban, Glicksman, & Rovine, 1991; Pruchno, 1990; Yamamoto-Mitani *et al*., 2004). Therefore, making positive appraisals essential within the nursing environment.

Negative experiences

Nurses evaluated the events (for example, patients attacking the nurses, inappropriate racial remarks, and conflict from colleagues and managers) and the consequences of these events within the nursing environment as negative, unpleasant, and unpredictable, which was also supported by Farmakas, Papastavrou, Siskou, Karayiannis, and Theodorou (2014) and others (Gandhi, Sangeeth, Nurnahar, Ahmed, & Chaturvedi, 2014; Omeri & Atkins, 2002). Nurses reported that the negative consequences within the nursing environment are something they can live with due to the fact that they have no control over what happens and also comprehend the notion that such negative incidents (e.g., death of a patient) are immensely evident within the nursing environment; therefore they should expect such outcomes even though it is not ideal for them (Browall, Henoch, Melin-Johansson, Strang, & Danielson, 2014). Some of the findings revealed that the nurses evaluated the events as them being treated unjustly as the consequences were incongruent with their own standards and ideals, but also that some of the outcomes violated socially accepted laws (Omeri & Atkins, 2002; Stenbock-Hult & Sarvimäki, 2011). In addition, the nurses revealed that they experienced irrevocable loss (e.g., death) as the consequences of various incidents were deemed as sudden and unexpected, which affected their own psychological wellbeing as they did not anticipate such outcomes (Borbasi, Wotton, Redden, & Chapman, 2005; Pattison, Carr, Turnock, & Dolan, 2013; Rejnö, Danielson, & von Post, 2013). Lastly, the consequences or outcomes of these incidents can be considered as due to their own behaviour and others being attributed to the patient's behaviour, of which they had no control over (Bennett & Louw, 2008).

A study conducted by Martin and Daniels (2014) provided evidence for several of the findings. They asserted that being in a negative, stressful environment, their subjective evaluation regarding the events are regarded as threatening to their overall wellbeing and that the environment is experienced as unpleasant, unpredictable, and not ideal, which consequently affects their ability to cope or effectively adapt within that environment. Skaggs and Baron (2006) and others (Kausar & Khan, 2010; Kira, Omidy, & Ashby, 2014; McCammon ,Durham Allison, & Williamson, 1987; O'Hare, Sherrer, & Shen, 2014; Rodney, 2000; Ross & Goldner, 2009), concur with Martin and Daniels (2014) by adding that negative events (e.g., illness, threats from patients, injuries on duty, death), cause nurses to experience emotional and psychological distress and post-traumatic stress symptoms and therefore, find it difficult to adapt or to attain meaning in such a negative environment. In addition, negative appraisals has been related to poorer physical health in nurses and reduced caregiving efforts (Fitzell & Pakenham, 2010; Kim, Baker, & Spillers, 2007; Lambert, Yoon, Ellis, & Northouse, 2015).

The *fourth specific objective of this study* was to determine how the subjective feeling component of the CEA is experienced among nurses in accordance to the different situation-specific emotional episodes. As mentioned before, there exists a difference between a feeling and an emotion. An emotion can be described as the synchronisation of activities that comprises of the five components of the CEA and prepares the individual for event adaptation (Scherer, 2005), whereas a feeling signifies only a component of an emotion in which the individual is, consciously, made aware of the emotion process (Fontaine *et al*., 2013). As such, findings will be discussed related to both subjective feelings and emotions in accordance to the positive and negative experience indicated by the results.

Positive experiences

Results indicated that working in the maternity ward and witnessing the birth of new-borns, miracles, and positive feedback from patients are experienced as positive, favourable, nurses reported positive emotions such as happy, happiness, and joy and subjective feelings such as feeling energetic, good, positive, and calm. Meeusen, van Dam, van Zundert and Knape (2010) support this findings by indicating that nurses experience positive subjective feelings such as energetic, enthusiastic, proud, at ease, inspired, satisfied, and relaxed due to positive events within the working environment. With regards to positive emotions, studies (e.g., Bono, Foldes, Vinson, & Muros, 2007) reported that nurses reported positive emotions such as happy. In

addition, such positive feelings and emotions enhance nurses' perception of job satisfaction. Tugade and Frederickson (2004) and others (Garland *et al*., 2010; Turner & Stokes, 2006) posit that positive emotions enable nurses to recover swiftly from negative events or emotional dysfunctions and serves as a positive purpose whereby nurses can efficiently cope with the negative side of nursing and experience feelings of hope. Garland and Howard (2009) asserted that positive emotions can even initiate changes in the brain structure which aids in the promotion of effective adaptive behaviour to negative events.

Negative experiences

Findings from this study indicated that nurses reported several emotions, such as worried, scared, fear, angry, unhappy, angry, sad, upset, stress, bitter, cross, surprised, rage, hate, disappointment. These emotions were experienced in accordance to events such as witnessing death, needle prick injuries at word, management refusal to provide additional training for nurses, unethical dilemmas. Conversely, they also reported to feel negative, nervous, bad, out of control, and powerless as the result of the outcomes. Li, Turale, Stone, and Petrini (2015) support these findings by stating that due to nurses experiencing physical and psychological threats within the nursing environment, they reported negative emotions such as worried, afraid, sad, and shocked. In addition, they reported a subjective feeling such as feeling nervous. Secor-Turner and O'Boyle (2006) and others (Bennett & Louw, 2008; Buck, 2011; Dong *et al*., 2015; Erickson & Grove, 2007; Meeusen, van Dam, van Zundert, & Knape, 2010; Savage, 2003; Sloand *et al*., 2012) also supported these findings by adding that traumatic events and negative events within the nursing environment (e.g., witnessing death, patient attacks, and injuries at work) will evidently evoke negative emotions such as fear, sorrow, frustration, sadness, and anger as nurses observe enormous loss, tragedy, and illness and suffering; therefore nurses feel overwhelmed in the nursing environment and also contemplate on whether they made the right decisions in terms of career choice. As a result, nurses feel powerless and hopelessness due to not them being able to do anything (Kayama *et al*., 2014; Shoorideh, Ashktorab, Yaghmaei, 2012).

The *fifth specific objective of this study* was to determine how the action tendency component of the CEA is experienced among nurses in accordance to the different situation-specific emotional episodes. Within the findings, nurses reported several action tendencies. An action tendency, according to Frijda (1987), can be defined as a "*readiness to engage in action for*

establishing, maintaining, or breaking the relation with particular aspects of the environment (action tendency), *or as readiness to engage in relational action generally* (activation mode)" (p. 132). As such, nurses reported action tendencies for both the negative and positive experiences.

Positive experiences

Regarding the positive experiences (e.g., infant delivery, miracles pertaining to patient coming back to life, and witnessing a patient being joyful as a result of good health outcomes), nurses reported that when in an event, even if they don't act, they thought of doing something, anything for that matter; they wanted to act in the situation, any action would be accepted; they wanted to be close to the individuals within the event; they wanted to tackle the situation; and lastly, they reported that if they could act, they wanted to take initiative to possibly change the situational outcomes. As the nurses shows interest in their patients, Izard (1977) stated that due to individuals being interested, their action propensity would likely be "*a feeling of wanting to investigate, become involved, or extend or expand the self by incorporating new information and having new experiences with the person or object that has stimulated the interest*" (p. 216).

Negative experiences

Regarding the negative experiences (e.g., deaths, unethical practises, and conflict with colleagues/managers) within the nursing environment, nurses reported that they felt inclined to tackle the situation or to keep/push things away. Their motivation propelled them to want to damage, hit, or hurt others by their words. In action, they felt ready to act or take action in any manner possible. Lastly, they were prone to run away or to oppose. Klein and Klinger (1991) asserted that when individuals are confronted with complex and emotional situations, they act and react as a result of their intuition and previous experience, and rarely on an analytical means. This is congruent with Frijda's (1987) theory of acting in a manner as a response to previous experience, but also which is congruent with the individuals' goals. In this instance, nurses evaluated the environment and the possible consequences and thought that these typical action propensities (e.g., fleeing, damage something/someone, push things away) as best serving their own subjective and physical wellbeing (Ekman, 1972; Izard, 1977). Dalton and Gottlieb (2003) concur by adding that nurses will firstly appraise the possible outcome, then acting as a result of the costs of benefits to their goals incurred.

The *sixth specific objective of this study* was to determine how the motor expression component of the CEA is experienced among nurses in accordance to the different situation-specific emotional episodes. As mentioned previously, emotions are elicited as a result of certain appraisal checks; consequently if there are congruencies or incongruences with regards to the appraisal checks, the individual will elicit a certain emotion. This process will be followed by the individual communicating their emotions in terms of motor expressions, either facially or vocally (Scherer, 1984; 2001; Scherer & Ellgring, 2007). As such, within the study, nurses communicated their emotions in motor expressions as they experienced positive and negative events.

Positive experiences

Nurses, within this study, typically smiled and used their eyes (e.g., smile with eyes, eyes gaze) to communicate their positive affect for the positive events such as positive patient health outcomes, delivering babies, and witnessing miracles. Some, however, frowned during positive events, which is also a unique finding regarding facial expressions and positive affect in this study. In terms of vocal expressions, nurses reported to speak louder as their vocal cords intensified, they produced short utterances, and spoke in an assertive voice. Caris-Verhallen, Kerkstra, and Bensing (1999) and others (Chan, 2013; Fosbinder, 1994; Franzen, 1998; Perry, Toffner, Merrick, & Dalton, 2011) reported similar results compared to this study's findings regarding facial expressions in positive encounters. Accordingly, nurses expressed their emotions by means of smiling and gazing their eyes. As a result, good rapport was established among the patients as the patients provided the nurses with good acknowledgement, thus mutual trust could be established. Bolton (2001) also found that nurses smile as a means to keep the patient happy. Haskard, Williams, DiMatteo, Heritage, and Rosenthal (2008) reported that when nurses speak in a positive tone, the patients' health outcomes improved as the patients feel support from the nurses.

Negative experiences

During negative events (such as death, patient attacks, and hospital guidelines not being followed), within the nursing environment, nurses reported that these incidents made them cry, frown, and they gazed their eyes. A unique findings, not in accordance to the CEA, was that

nurses reported to use lip movements to communicate their dissatisfaction. Shoorideh, Ashktorab, and Yaghmaei (2012) and others (MacKusick & Minick, 2010; Rana, Pongruengphant, & Tyson, 2000) supported the findings by stating that when nurses are in emotional distress, they produce tears as a means to express their discomfort and inability to adapt efficiently to the negative event (Corley, 2002; Lazarus, 1995). In terms of the vocal cues, they reported to increase their voice, they produced utterances and disturbances, their voice trembled when speaking, they fell silent at times, they changed the melody of their voice, and they spoke in an assertive manner and increased their vocal words (Fontaine *et al*., 2013). Rochman, Diamond, and Amir (2008) reported that emotions such as sadness and anger (which is associated with negative events) produced changes in the voice. The changes in the voice occurred in the form of increased articulation rate (e.g., increased vocal words) and had an increase in their voice pitch (e.g., increased volume of voice, had an assertive voice).

The *seventh specific objective of this study* was to determine how the physiological changes component of the CEA is experienced among nurses in accordance to the different situation-specific emotional episodes. As previously indicated, various physiological occurrences are evoked in individuals as a result of the emotional experiences (James, 1884). As such, due to the fact that the nursing environment is equated with incidents that evoke both positive and negative emotions, nurses reported numerous physiological changes as a result.

Positive experiences

Findings pertaining to this study only reported two physiological occurrences as a result of the expose to positive encounters such as witnessing miracles. This may be due to the nurses being in an enthusiastic state of mind and therefore unaware of the physiological occurrences that they experience. However, in this instance, situations which evoked positive emotions or positive experiences within nurses reported to feel warm in their bodies and indicated that their muscles were in a relaxed autonomic state. Fredrickson (2000) and Stone, Kennedy-Moore, and Neale (1995) provides evidence regarding physiological relaxation as a result of positive affect. This is true for the findings within this study as nurses reported positive experiences that led to positive emotions. Sonnentag, Binnewies, and Mojza (2008) concur with the above scholars by adding that a state of physiological relaxation or positive activation is related to feelings of serenity. Serenity can be described as a feeling of inner peace despite negative events (Gerber, 1986). As such, one would suggest that due to the nurses' bodies responding

in a warm and relaxed manner, their cognitive evaluation of the situation seems to be calm and serene and therefore they were able to physical respond in a relaxed manner.

Negative experiences

Conversely to the positive physiological occurrences, nurses reported much more physical changes when exposed to negative events such as needle prick injuries and patient attacks. During situations which is deemed as negative and stressful, they reported their feelings in a distressing autonomic manner such as their muscles tensing up, they felt their limbs going weak, had a lump in their throat, felt cold, and had shivers. In addition, they reported to experience gastrointestinal problems and reported an awareness of their heartbeat increasing. However, a unique finding was reported within this study, which does not correlate with the Grid-Based features. As such, nurses reported to experience headaches as a result of the immense exposure to emotional-laden situations. Several studies (e.g., Eatough, Way, & Chang, 2012; Long, Johnston, & Bogossian, 2012; Shoorideh *et al*., 2012; Smith, Wei, Kang, & Wang, 2004) support the findings within this study pertaining to gastrointestinal and musculoskeletal problems as a result of emotional and psychological distress, which is from experiencing the environment as negative. These typical biological consequences, which is due to emotional distress, impedes the nurses' ability to provide quality care and fulfil their professional duties as a nurse (Park *et al*., 2003), as well as to cope with the demands of the nursing profession (Fry, Harvey, Hurley, & Foley, 2002; McCarthy & Deady, 2008).

Practical implications

The practical implications of this study for the field of Industrial Psychology signifies addressing work-related factors that contribute to human behaviour and functioning in a workplace. The particular role of an Industrial Psychologist is to plan, develop, and research strategies that will aid employees in functioning more effectively at work. As such, the practical implication of this study can be seen as the researcher focusing their research on emotions and the meaning of emotions among nurses that will aid the nurses in understanding the emotional process they go through during emotional events. In addition, from a managerial point of view, initiatives can be constructed that will aid nurses in emotion management, especially during negative events.

Limitations and recommendations

Limitations

Several limitations are observed with the current study. Firstly, the sample size utilised was small. Although phenomenological qualitative studies' sample size can include 9-12, a possible limitation can include the amount of participants utilised in this particular study and therefore overall generalisations couldn't be made. Secondly, the study comprised only of females. Given that the nursing profession is mostly populated by females, attempts will have to be made to include more balanced demographics, which can be beneficial in understanding the differences or similarities in terms of emotional reactions to critical incidents for male and female. Thirdly, the study was only conducted in Potchefstroom which is part of the North-West province. Thus, further studies will need to be conducted in other regions of the country to ensure generalisation of the results. Fourthly, the generalisations were made to the health sector as a whole and therefore specific inferences cannot be made for the public and private sector respectively, which comprises of the health care sector.

Recommendations

Possible recommendations for practise can include to show the results to the health care sector in order for managers and professionals to understand the type of critical incidents that nurse's face as well as to give acknowledgement to the type of emotions which are evoked within those incidents. As a result, strategies can be implemented to ensure nurses are better taken care of within the health care environment. Further recommendations can include to extend the study which may possible provide results for the public and private sector and to determine how these two sectors differ in terms of the incidents experienced and emotions evoked. Another study can attempt to utilise the hermeneutic, interpretive approach as to allow the process to bring about a deeper meaning and reason for the particular incidents and emotions. A study with a balanced approach in terms of various cultures, genders, age groups are encouraged to provide a different perspective.

Conclusion

In conclusion, the nurses were able to report on all five CEA components. Although as observed from findings not all the features pertaining to the individual components were reported. This can be due to two things: the environmental demands or language of expression. In terms of the environmental demands, the incidents as reported by nurses in this study could

produce limited reactions which are partially covered by the scope of the CEA, thus relatable only to the nurses experiencing those situations. Regarding the language of expression, as the interviews were conducted in English and Afrikaans (i.e., two languages which are a medium of communication in many organisation, including the health sector, in South Africa), it is possible that the vocabulary of expression was limited for some participants in the current study. Thus, further studies will need to be conducted covering different languages in the nursing environment.

Overall, the CEA is comprehensive framework as evidence from the GRID study covering its scope (Fontaine *et al*., 2013). Thus beneficial for the nursing environment which is constantly exposed to traumatic events, hence the representation of more negative experiences than positive experiences in terms of the subjective feeling component. As such, this study shared some light on a new framework that can be applied to study emotions comprehensively and further can be utilised for the development of assessment measures that can be used for recruitment, selection and training.

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CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Within chapter 3, a conclusion is presented, which takes into consideration the findings as from the research objectives and its relation to conclusions from the literature review. Thereafter, limitations pertaining to the study will be discussed as well as recommendations for future research and practice.

3.1 Conclusion

The objective of the study was to explore the situation-specific emotional episodes among nurses and to describe how the componential emotion approach is applied within those typical situations. A conclusion can be drawn that the application of the componential emotional approach, within the nursing profession, was successful in its endeavour to describe the meaning of emotion in terms of the five substrates of the CEA, known as appraisals, subjective feeling, motor expressions, action tendencies, and physiological occurrences. As a result, significant inferences could be made regarding the meaning of emotion that nurses attach when exposed to incidents that are deemed as positive and others as negative. In further concluding this study, it was ideal to construct an eidetic profile which can be used as a framework for the interpretation of the research results. An eidetic profile stems from Moustakas (1994) who uses an eidetic profile to construct a universal essence of a certain phenomenon. The particular reason being is that one can attain a visual overview of a phenomenon and use it for further meaning exploration. The significant contribution that the researcher desired to make was to construct a descriptive eidetic profile (or universal essence) of the CEA among nurses in the South African context that evidently indicates the experience of the components in relation to positive and negative events. As such, table 1 provides an eidetic summary of the CEA feature profile as experienced among nurses. In addition, from within the findings, 4 main organisational categories were extracted, followed by several sub-categories, known as emotional episodes or critical incidents.

Table 1

Eidetic profile of the CEA among nurses

Main Organisational Categories	Critical Incident	Appraisals	Subjective Feeling	Emotion Words	Action Tendency	Motor Expression		Physiological Change
						Facial Expression	Vocal Expression	
POSITIVE EXPERIENCES								
• Meaning at Work • Job Satisfaction	• Maternity Ward: Infant Delivery • Miracles • Significance	• Inconsistent with expectations • In itself pleasant for the person • Important and relevant for person's goals • Consequences positive for somebody else • Unpredictable	• Felt energetic • Felt good • Felt positive • Felt calm	"Happy" "Happiness" "Gelukkig/*Happy*" "Geniet/*Enjoy*"	• Felt an urge to be active, to do something, anything • Wanted to be near or close to people or things • Wanted to act, whatever action it might be • Wanted to tackle the situation • Wanted to take initiative her/himself	• Smiled • Showed tears • Uncategorised facial expression: eye movement • Frown	• Increased the volume of voice • Produced a short utterance • Had an assertive voice	• Muscles relaxing (whole body) • Felt warm
NEGATIVE EXPERIENCES								
• Occupational Health and Safety • Organisational Best Practise	• Death • Patient attacks • Needle Prick Injury • Hospital Procedural Guidelines • Staff Training and Development • Performance Management • Racial Discrimination • Unethical Practises • Conflict Management	• Consequences able to live with • Irrevocable loss • In itself unpleasant for the person • Consequences negative for person • Incongruent with own standards and ideals • Suddenly • Unpredictable • Caused by persons own behaviour • Suddenly • Violated laws or socially accepted norms • Important and relevant for person's goals • Treated unjustly • Caused by somebody else's behaviour • Inconsistent with expectations	• Felt bad • Felt negative • Felt nervous • Felt out of control • Felt powerless	"Worried" "Scared" "Fear" "Angry" "Unhappy" "Sad" "Upset" "Stress" "Bitter" "Cross" "Surprised" "Woended/Rage" "Haat/Hate" "Bitter" "Disappointed"	• Wanted to keep or push things away • Wanted to take initiative her/himself • Wanted to tackle the situation • Wanted to damage, hit, or say something that hurts • Wanted to take action, whatever action it might be • Wanted to act, whatever action it might be • Wanted to run away in whatever direction • Wanted to oppose	• Showed tears • Frowned • Uncategorised facial expression: lip movement • Uncategorised facial expression: eye movement	• Uncategorised vocal expression: increased vocal words • Produced a short utterance • Produced speech disturbances • Changed the melody of voice • Had a trembling voice • Increased the volume of voice • Had an assertive voice • Fell silent	• Felt weak limbs • A Lump in throat • Muscles tensing (whole body) • A lump in throat • Felt cold • Felt shivers • Uncategorised bodily sensation: Headache • Heartbeat getting faster • Had stomach troubles

From the overview the following conclusions are drawn based on the objectives of the study.

Specific objective 1: To conceptualise the componential emotion approach according to the literature.

Literature indicates that the concept of the componential emotion approach is a recent framework, which consist of different components that investigates emotions (Mesquita, Frijda, & Scherer, 1997). The approach came into effect as a result of various debates relating to how to define emotions (Kleinginna & Kleinginna, 1981) which lead to a confusion of the construct. For instance, some scholars argued that an emotion is solely the physiological occurrences that the individual experience which can lead to the elicitation of an emotion (e.g., James, 1884; 1890; 1894; Cannon, 1927; 1929; Kriegel, 2011). Others have argued that an emotion is the sole product of motor expressions that comprises of facial and vocal expressions (e.g., Darwin, 1872; Ekman, 1992; 1994; Ekman, Sorenson, & Friesen, 1969; Izard, 1991). Lastly, scholars view emotions as the motivational force that drives behaviour (e.g., Frijda, 1987; 2010).

Conversely to the individual component ideologies regarding emotions, Scherer (1987; 2004; 2005) proposes to rather characterise an emotion as comprising all of the abovementioned components, with the inclusion of subjective feelings and appraisals. As such, the Componential Emotion Approach defines an emotion as "*an episode of interrelated, synchronized changes in the states of all or most of the five organismic subsystems/components in response to the evaluation of an external or internal stimulus event as relevant to major concerns of the organism*" (Scherer, 1987, p. 697). These five organismic systems include: (a) *appraisals*, which refers to the subjective evaluation, based on stimulus evaluation checks, of the significance of an event in response to an individual's goals, values and needs; (b) *subjective feelings*, referring to the emerging component during the elicitation of an emotion and serves the purpose of a monitoring and regulating function; (c) *motor expressions*, which insinuate that emotions are prompted by facial expressions (e.g., smile when happy or frown when angry) and vocal expressions (e.g., shout when angry or laugh when happy); (d) *action tendency*, which denotes the idea of the propensity to engage in action in response to environmental contingencies; and (e) *physiological changes*, indicating the changes in the autonomic nervous system (e.g., shivers or feeling cold) which indicates a certain emotion.

In addition, all of the five substrates of the componential emotion approach are primarily represented and continuously fused in a multimodal integration area, which constantly updates as events and appraisals change (Scherer, 2009). Thus, within South Africa, the CEA has not yet been researched as a dynamic synchronised framework for measuring the meaning of emotions in a qualitative manner; thus the purpose of this study.

Specific objective 2: To explore the situation-specific emotional episodes among nurses.

Findings indicated that nurses are confronted with numerous positive emotional episodes (e.g., delivering babies, witnessing miracles, and favourable responses from patients as a result of caring) and negative emotional episodes (e.g., witnessing death, patient attacking the nurses, injuries at work such as needles pricks, guidelines that are not being followed, inadequate training and development opportunities, performance management challenges, inappropriate racial remarks, unethical dilemmas, and conflict) which affects their overall wellbeing and psychological state of mind (Burhans & Alligood, 2010; Klopper, Coetzee, Pretorius, & Bester, 2012).

Regarding the positive experiences within the nursing environment, two main organisational attitudes were identified: Meaning at work and Job satisfaction. Meaning at work is a concept that is immensely important and relevant among nurses due to the fact that it contributes to higher levels of psychological and emotional welfare, having a purposeful life, and as a result is able to truly extent themselves to care for the patients' emotional, physical, and psychological needs (Lips-Wiersma & Morris, 2011; Newton, Kelly, Kremser, Jolly, & Billett, 2009; Skaggs & Barron, 2006). In addition, nurses feel that they are "called" for this profession as they are able to contribute to a higher purpose, in which they are making a difference in the patient's life (Beukes & Botha, 2013; Van Zyl, Deacon, & Rothmann, 2010), which links to the concept of job satisfaction. Job satisfaction signifies the positive attitude and positive feelings that a person has towards their job (Kerschen, Armstrong, & Hillman, 2006). As nurses feel satisfied with the job they do in caring for patients, they are more inclined to stay within the nursing profession, are more engaged in their relationship towards the patient, and will evidently, extent themselves beyond their call of duty (Lu, Barriball, Zhang, & While, 2012; Radebe & Dhurup, 2014; Yakin & Erdil, 2012).

In terms of the negative experiences within the nursing environment, two organisational strategies or processes were extracted: Organisational health and safety and Organisational best practise. Both these processes are deemed as positive initiatives that are utilised to manage, maintain, and promote the provision of quality health care (Keller, Strohschein, & Schaffer, 2011), yet it is perceived by nurses as ineffective, leading them to feel negative towards the nursing profession (Rothmann, Van der Colff, & Rothmann, 2006). Findings pertaining to occupational health and safety strategies revealed contentious results as nurses were confronted with incidents which threatens their physical and psychological health and safety. The consequences of these threats are detrimental to the nurses as they are incapable of providing the quality care that is required of them (Geiger-Brown & Lipscomb, 2011), it contributes to nurse staff shortages due to the nurses wanting to leave the profession (Stone, Clarke, Cimiotti, & Correa-de-Araujo, 2004), and contributes to staff absenteeism, stress, and burnout (Houle, 2001). In addition, nurses also reported that health and safety of the nurse personnel was not deemed as a major concern for the healthcare organisation, due to the fact that the organisation see it as "part of their job" and not making any effort to enhance the health and safety protocols among nurses, especially those working in night shift (de Castro, Cabrera, Gee, Fujishiro, & Tagalog, 2009; McPhaul & Lipscomb, 2004). As a result, the nurses feel afraid for their life during working hours, which discourages personal growth and wellbeing (Fernandes *et al*., 1999; Griffin, 2004). Nurses also reported issues related to organisational best practises. Organisational best practises are implemented to ensure that the nurse personnel are managed in accordance to the nursing guideline which ensures the provision of quality health care (South African Nursing Council, SANC, 2015). However, findings pertaining to this study indicated that nurses feel that they are not taken care of within the profession and they are confronted with incidents which makes them question why they are in this type of profession, despite the positive encounters. Many nurses hold the belief of an idealistic perception of caring for others as they are inadequately informed of what they will be confronted with in the nursing profession (Price, 2009; Price, McGillis, Hall, Angus, & Peter, 2013). As a result, their expectations are not matched with what they are actually exposed to, in which they feel they have been misled, which impedes their perception of the nursing environment of how they are contributing to this profession in a profound manner (Stone & Feeg, 2013). As a result, these typical unmet expectations also encourages them to leave the nursing profession (Hegney, Eley, Plank, Buikstra, & Parker, 2006).

Specific objective 3: To determine how the appraisal component of the CEA is experienced among nurses within different situation-specific emotional episodes.

The conclusion that can be made regarding appraisals is that the nurses reported appraising specific events positively and negatively. An appraisal signifies the subjective evaluation one has towards an event and the significant implication of the event on the person goals, values, and needs (Scherer, 1982; 2009; Smith & Ellsworth, 1985; Roseman, 1991).

Results indicated that when nurses are confronted with events that are characterised as positive, their subjective evaluation of these typical events were described as inconsistent with their expectations and unpredictable (positive connotation), the evaluation was goal-relevant, and lastly, as the events signified a pleasant evaluation, the consequences for the other party were of a favourable nature. An appraisal serves the function of monitoring and regulating emotions elicited in certain events and also direct the action response patterns (Folkman & Lazarus, 1985). As such, Kira, Omidy, and Ashby (2014) asserted that positive appraisals, as found within this study, is related to positive coping and growth, whereby the individual can swiftly bounce back into a positive state after being exposed to a negative incident. In addition, positive appraisals are associated with positive emotions that enables a person for effective adaptive outcomes (Goldin, McRae, Ramel, & Gross, 2007; Lin, Wu, Chen, & Chen, 2014) and higher levels of resilience (Fredrickson, Tugade, Waugh, & Larkin, 2003). Lastly, the individual will attempt to uphold these positive experiences by engaging in emotion-regulation strategies that maintains their positive affect, which results in enhanced engagement at work (Kelly, Mansell, Sadhnani, & Wood, 2012; Mansell, Morrison, Reid, Lowens, & Tai, 2007). These findings can be related to how nurses typically appraise situations and the consequences thereof.

Conversely, the findings reported that nurses who are exposed to negative incidents attributed the following subjective evaluations towards the situations: they evaluated the incident as undergoing irrevocable loss, sudden and unpredictable; it was unpleasant for them and the consequences was negative for them; it was inconsistent with their expectations, standards and ideals; some evaluations led them to believe that the incident was caused by somebody else's behaviour, y*et al*so due to their own behaviour; they reasoned to be treated unjustly and laws or socially accepted norms were violated; and lastly, their evaluations resulted in being able to live with the consequences and the situations was seen as goal-relevant. As mentioned before, an appraisal serves a function in maintaining and executing of adaptive behaviour, however,

when an appraisal is negative it discourages robust and flexible adaptive coping, which is detrimental to, for example, nurses' overall physical and psychological wellbeing (Kira *et al*., 2011). For example, negative appraisal has been linked to mental disorders such as depression (Kring & Sloan, 2010; Kelly *et al*, 2012); memory deficiencies (Richards & Gross, 2006); curbed and evasive emotional coping (Campbell-Sills, Barlow, Brown, & Hofmann, 2006); and constrained cognition and distress (Fredrickson *et al*., 2003). For the physiological consequences, appraising situations as negative has been associated with increase sympathetic and autonomic nervous system activation (Hofmann *et al*., 2005). In addition, negative appraisals or evaluations towards the emotional events are associated with negative emotions such as fear, anger, sadness, guilt, uneasiness, and embarrassment (Ruth, Brunel, & Otnes, 2002). As a result, nurses are more likely to want to avoid such events as they are aware of the negative consequences towards their goals, values, and needs.

Specific objective 4: To determine how the subjective feeling component of the CEA is experienced among nurses within different situation-specific emotional episodes.

In concluding the subjective feeling component of the CEA, a differentiation can be made with regards to an emotion and a subjective feeling. An emotion refers to the synchronised activity between the five substrates of the CEA, which includes subjective feelings. A subjective feeling serves the purpose to make the individual aware of the emotion process to follow (Russell, 1980; 2003). As such, results indicate that nurses reported both emotions and subjective feelings during an emotional episode. When the nurses were confronted with emotional episodes that was deemed as positive, results indicate the expressed positive emotions such as happy, joy, happiness. To make them aware of these emotions, they felt energetic due to being overwhelmed, felt positive, good, and calm. During the experience of negative emotional episodes, results indicate negative emotions such as worry, scared, fear, angry, unhappy, sad, upset, stress, bitter, cross, surprised, rage, hate, and disappointment. In order to make the nurses aware of these emotions, results indicated that they felt bad, negative, nervous, out of control, and powerless. Subjective feelings serve the purpose in consciously reflecting the typical emotions that are about to follow during an emotional episode (Russell, 2003). In other words, they make the organism aware that a change is about to occur in the organism which will enable a certain reaction as a means to survival with regards to environmental lashes. As for the nurses, these typical subjective feelings makes them aware that an emotion is to follow and that their bodies will produce reactions as a result (Fontaine *et al*., 2013). The implication for nurses is

that they can acknowledge that an event was either congruent or incongruent with their goals, values, and needs, and therefore a feeling will make the nurse aware of the typical emotion to follow. As a result, during care giving or social interactions with patients, they are made aware that some sort of a conflict exists and they can act on it.

Specific objective 5: To determine how the action tendency component of the CEA is experienced among nurses within different situation-specific emotional episodes.

It can be concluded with regards to action tendencies that nurses felt propelled to act in numerous ways when exposed to different emotional episodes. An action tendency prepares the body in a motivational state to act in a certain manner in an emotional episode (Frijda, 1987; 2010; Frijda, Kuipers, & ter Schure, 1989). As such, results indicated that the nurses felt inclined to be near objects or the people involved in an emotional episode. They felt an urge to act or be active, in any manner. Lastly, they felt an action propensity in the form of wanting to tackle the situation and to take initiative themselves. Regarding the experience of negative emotional episodes, the results indicate that they wanted to flee (run away), felt inclined to a fight response (keep or push things away and hit damage, say something that hurts or oppose to something), and wanted to take action or act, in any manner possible. Lastly, results indicate that they wanted to take initiative, and to tackle the situation. The implication for nurses asserts that various action tendencies infuse the mind and the body, which simultaneously narrows down the nurse's action propensities, while mobilising the autonomic and somatic nervous system. Action inclinations serve the purpose to determine the nurse's evolutionary adaptive meaning of their emotions (Frijda, 1986; Smith & Lazarus, 1990). In other words, the specific action tendencies that the nurses evoke explains the best adaptive purpose for their wellbeing and health during negative and positive emotional episodes (Tooby & Cosmides, 1990ab).

Specific objective 6: To determine how the motor expression component of the CEA is experienced among nurses within different situation-specific emotional episodes.

It can be concluded from the results that nurses reported numerous facial and vocal expressions when exposed to different situation-specific emotional episodes. Facial and vocal expressions signifies a response to an appraised emotional-eliciting event, based on the individuals goals, needs, and values which caused numerous changes in the somatic nervous system occurs (Ekman & Friesen, 1978; Gobl & Ní, 2003; Laver, 1980). As such, during events which was

appraised as pleasant, goal-relevant and the consequences for the other party involved were favourable, the results indicate that nurses smiled, shed tears, frowned, and showed their emotions by means of their eyes (e.g., smile with eyes). With regards to their vocal expressions, results pertaining to this study indicated that nurses increased their vocal cords by speaking louder, they produced short utterances, and spoke in an assertive voice. Conversely, the results indicated that nurses appraised events as incongruent with their goals and unpleasant, which in turn evoked somatic changes such as shedding tears, frowned, grinded their teeth, and gazed their eyes. In terms of vocal changes, they increased their vocal words and vocal cords, produced speech utterances and disturbances, changed the melody of their voice, spoke in an trembling voice, at times fell silent and spoke in an assertive voice. Face and vocal expressions are deemed as a powerful influential means to portray one's current affective state in human social interactions (Darwin, 1872; Scherer & Ellgring, 2007). The implication on nurses is that the patients and other colleagues can make significant interpretations regarding their affective state, which may place them in a vulnerable position, just by observing their facial and vocal expression. On the positive side, improved patient health outcomes has been related to positive facial and vocal expression (Haskard, Williams, DiMatteo, Heritage, & Rosenthal, 2008), whereas negative facial and vocal expressions can be translated as not caring for the patient, being unsupportive, and unable to adapt to negative events (Corley, 2002).

Specific objective 7: To determine how the physiological changes component of the CEA is experienced among nurses within different situation-specific episodes.

It can be concluded that nurses reported various physiological occurrences as a response to the typical emotional episodes they are exposed to. Results indicated their body temperature increased as they experienced a warm feeling and their musculoskeletal system relaxed as a response to positive emotional episodes. Conversely, their autonomic nervous system were increasingly activated during the experience of negative emotional episodes. The results indicated gastrointestinal occurrences such as stomach troubles, body temperature changes as to feel cold, felt shivers, had a lump in their throat, increased heartbeat, and headaches. In addition, results indicated musculoskeletal system activation such as the body tensing up and felt weak limbs. The implications for the nurses can be related to the notion that these typical physiological occurrences prepares them for emotional episode adaptations and survival (Wallbott &Scherer, 1986). As a result, they can swiftly respond for the sake of their own wellbeing and physiological health and safety (Ekman, 1992; Levenson & Ruef, 1997).

Specific objective 8: To make recommendations for future research and practice.

This objective will be addressed in section 3.3

3.2 Limitations

This particular research study had various limitations. The *first limitation* relates itself to the use of only female participants. In order to generalise to an overall population, the participant database needs to include demographical information pertaining to both genders. As a result, generalisations can only be made to females. However, one must also take into consideration that the nursing profession comprises mostly of females (South African Nursing Council, 2015).

The *second limitation* concerns the generalisation of the results. The current research was conducted mainly in Potchefstroom which is a town in the North-West province. Therefore, results cannot be generalised to other parts of the country. It is important to note that different cities has different challenges in terms of health care and therefore different results may also be produced. Also, refence was not given to participants with different cultures, age, and education levels as these components plays a pivotal part in how incidents are experienced and managed.

The *third limitation* relates to the language employed for data collection as English and Afrikaans was mainly used. Majority of the sample indicated their home language as Setswana, thus ideally Setswana could have been used, and however the main researcher is not fluent in the language.

The *fourth limitation* concerns itself with the use of the Componential Emotion Approach within South Africa. Due to the limited studies conducted within South Africa, it was difficult to drawn significant conclusions for a South African population.

The *last limitations* draws back to the differentiation between the different sectors in the health care sector; thus private and public. As the focus was only on the health care sector as a whole, specific inferences regarding the public and private sector could not be made. In other words, specific interventions cannot be implemented for the two sectors.

3.3 Recommendations

Recommendations are provided for practice, the profession, and future research.

3.3.1 Recommendations for practice and the profession

Recommendations for practice and the profession can include to utilise this eidetic profile in order to enable nurses to comprehend the meaning of emotions within the nursing profession. As awareness is made with regards to emotion meaning, strategies or interventions can be constructed in order to aid nurses in the management of emotional episodes, such as emotional intelligence training (i.e., understanding oneself and other's emotion as well as emotion regulation thereof). Such interventions can be made available to the overall health sector, informing management of appropriateness of training and developing its employees in this regard. This research can guide nursing professions in understanding what evokes certain emotions within nurses and how it affects the patients. In addition, training with regards to soft skills is recommended as to ensure the nurses are taken care of.

3.3.2 Recommendations for future research

Recommendations can be provided in terms of increasing the sample size to be representative of both genders; male and female. This will enable accurate generalisations with regards to the nursing profession. The study utilised the transcendental phenomenology strategy, which described the phenomenon.

A hermeneutic phenomenological strategy can be utilised in order to ascertain the meaning that the nurses attribute to the components of the CEA. In other words, to further explore the meaning that the nurses attribute to the experience of emotions in terms of the five components.

Another recommendation that can be made is to investigate cross-cultural difference or similarities in relation to the CEA within the nursing environment. Thus, the eidetic profile can serve as a framework in this regard to determine whether there are similarities or differences in terms of how different cultures experience emotions.

A second study can be extended which may include the development of an instrument which identifies different emotive related stress in order to implement interventions to rectify the stress-related factors.

Studies which include observational methods of data collection is encouraged as the next researcher can obtain a visual representation of emotions. This may also contribute to the validity of visual emotion expressions.

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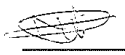
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Appendix A: Example of an Informed Consent

CERTIFICATE OF INFORMED CONSENT

I have read the abovementioned information or it has been read to me. I have the opportunity to ask questions about it and they have been answered to my satisfaction.

I hereby voluntarily consent to be a participant in this study.



Signature of Participant

16/05/2014

Date

For the Researcher:

I have ensured that the participant accurately understand the information required for informed consent. I confirm that the participant was given the opportunity to ask questions about the research and all the questions asked were answered to the best of my ability.

I confirm that the individual has not been coerced into giving consent and that the consent has been given freely and voluntarily.



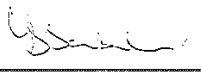
Signature of Researcher

J. Potgieter

CERTIFICATE OF INFORMED CONSENT

I have read the abovementioned information or it has been read to me. I have the opportunity to ask questions about it and they have been answered to my satisfaction.

I hereby voluntarily consent to be a participant in this study.



Signature of Participant

2014. 08. 16

Date

For the Researcher:

I have ensured that the participant accurately understand the information required for informed consent. I confirm that the participant was given the opportunity to ask questions about the research and all the questions asked were answered to the best of my ability.

I confirm that the individual has not been coerced into giving consent and that the consent has been given freely and voluntarily.



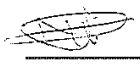
Signature of Researcher

J. Potgieter

CERTIFICATE OF INFORMED CONSENT

I have read the abovementioned information or it has been read to me. I have the opportunity to ask questions about it and they have been answered to my satisfaction.

I hereby voluntarily consent to be a participant in this study.



Signature of Participant

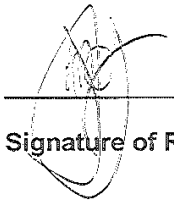
16/05/2014

Date

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Signature of Researcher

J. Potgieter

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Signature of Participant

2014-08-16

Date

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I confirm that the individual has not been coerced into giving consent and that the consent has been given freely and voluntarily.

Signature of Researcher

J. Potgieter

Appendix B: Example of Interview Schedule

Name of Participant:

- Please think back to the last, most recent emotion you experienced at work. How did you experience the situation?
- What were your emotional reactions within the situation?

Appendix C: Example of extracted interview

	WORK
R	With the work embarrassment **(SD)**, ne **(INT/VEX)**, like when we read research **(SD)**, ne **(INT/VEX)**, they say there is what we call reactive reaction **(SD)** ne **(INT/VEX)**.
I	Hmm.
R	And then active and what? **(UNC)**
I	Active and reactive.
R	Yes so sometimes they say the researchers shouldn't show the participant that she is watching her **(SD)**. She is observing her **(SD)** ne **(INT/VEX)** because the participant will feel embarrassed **(SD)** ne **(INT/VEX)** and then he will have that inner feeling that he does not want to participate anymore **(SD)**.
I	Hmm.
R	**But what I have realised with the supervisors, sometimes they are the ones who create problems for the nurses (AP)** and you will find them being admitted into the physiatrist department **(SD)**. Sometimes they absent themselves from duty **(SD)**. Sometimes people take poison to drink so that they could die and rest **(SD)**. Yes it is not good (AP?). If you are a leader **(SD)** ne **(INT/VEX)** and a junior comes in **(SD)** and you are with the other leader **(SD)**, you do like this **(SD)** and you smile like that **(SD)**. It is not good (AP?). It gives that one a bad impression **(SD)**. So why the seniors are like that? **(SD) (**
I	I have got no idea.
R	You have got no idea **(SD)**, okay **(INT/VEX)**.
I	No.. Because every individual is unique.
R	It is unique **(SD)**, ne **(INT/VEX)**.
I	You don't always understand why people act in a certain way you know. They might have gone through a situation in their life which caused them to be like that, but it is not to take personal. It is just something in their life.
R	But it is not good **(AP?),** ne **(INT/VEX)**. If I work with you **(SD)** and you feel that okay she likes this **(SD)** and that you need to sit down with me **(SD)** and show me but you can't just be peeping at me, laughing **(SD)**, because you make me feel bad **(SF)**. You make me not to be productive on my duties **(SD)** because I want to know why are they laughing at me every time that I enter **(SD?).** Why do they do like this every time that I enter **(SD)**. So **(UNC)**…
I	So yes it makes you, how does that make you feel when they laugh at you?
R	Bitter **(SF)**.. It makes me feel bitter **(SF)**, ne **(INT/VEX)**, but anyway it is fine **(SD)**.
I	Why does it make you feel bitter? is it do you feel they are gossiping about you?

R	Yes it is gossiping **(SD- LEADING Q).**
I	Yes that doesn't make you feel well.
R	Hmm **(INT/VEX)**.. It doesn't make me feel like **(UNC? SF?)**. Maybe when you work with me **(SD)** ne **(INT/VEX)** and you are working with somebody, with a client **(SD)**, and you want something **(SD)**, you can't be asking me every time, where is my pen where is the AGT meter **(SD)**. Don't you know where they are? **(SD)** Why don't you look for them? **(SD)** What do you want me, how do you want me to respond? **(SD)** Those are embarrassing things **(AP?)**. You can't say where is the laptop form **(SD)**.. Don't you know where the lab forms is **(SD)**.. Or where do you put them normally **(SD)**.. Where are the plastics **(SD)**.. Those things are embarrassing **(SD)**. It doesn't mean that when you are a senior, you have to sit here, in my head **(SD)**, no **(INT/VEX)**. Because when I talk you will say I am not mentally sound **(SD)**.
I	Yeah.
R	That is the word you are going to say **(SD)**. You are going to say matron she is not behaving good **(SD)**. She is not fine today **(SD)**. The facial expression is not good **(SD)**. So if you make me feel bitter **(SF)**, how do you expect me to express myself? **(AP?)**
I	Hmm.
R	The facial appearance, obviously, is going to change **(FEX)** because you are embarrassing me **(AP?)**.
I	How did your facial expression change? Like how did you, if you can describe it in words.
R	You become like you frown **(FEX),** ne **(INT/VEX)**, and when you frown you doesn't give a look, a nice look **(FEX).**
I	Mmm, yes.. And also in your voice? You know how…
R	You know because..
I	A high pitch? (R Mmm…) Higher pitch.. yes.. and uhm when that lady kicked you or then they did that, how did that or what bodily sensations did you feel in that moment you know. what did you physically feel in your body changed when you saw them laughing at you.
R	It is as if the blood pumps very actively **(BS).**
I	Hmm you can feel literally there is now a change in your body.
R	Hmm **(INT/VEX)**. In the blood flow **(BS).**
I	Yes.. Yes.. And when they did that, they laughed at you and you felt bitter now cause you thought why are they laughing. What did you want to do in that situation, what did you want to do?
R	I wanted to go out of the department **(AT).** Because when you work with the patient **(SD)** ne **(INT/VEX)**. When we are working bedside nursing, it is better **(AP)**. Because most of the time you are with the patient, you move from this patient to that other one

	(SD). You check to see if the patient is comfortable **(SD)**. Now when you are working in the office, eish, it is not nice **(AP)**. If a file is missing, I had to know where is the file **(SD)**. Meanwhile, I didn't not even handle the file **(SD)**. If the results are not there, I had to know **(SD)**. Meanwhile, the results were placed in the proper file **(SD)**. It is not good **(AP)**. So if I am working with the patient, I think it is better **(AP)**. Because I will go around and check if they are identified **(SD)**, are they all comfortable **(SD)**, are they care to make any pressure parts **(SD)**, and then is the treatment giving **(SD)**, is everybody happy **(SD)**, are they nursed properly **(SD)**, are the orders carried out for this **(SD)** and **that, ai, but it is fine (SD/SF?- she is saying ai, it is fine.. can that not be some form of feeling that she is over it?).**
I	When you when they also laughed. What did you then do. What was your actual action that you do. As you said that you wanted to leave the department that is what you wanted to do. So but what did you do at the end of the day.
R	Nothing (AB-actual behaviour).
I	Nothing why did you not do anything?
R	Like what **(UNC)**. Because when you talk, when you are emotional, you can't express yourself properly **(SD)**, ne **(INT/VEX)**. You had to wait for everything to cool down **(REG)** and when you are cooled down and people are laughing **(SD)**, you just raise the thing out and tell everybody about this **(SD)**, or a particular person, you may go to somebody and say I didn't like this and that, this and that **(SD)**. But when you are angry, you can't speak, because maybe you can cause trouble **(AP?).** It is best to keep quiet **(REG).** To walk out **(REG).** Or go to the toilet **(REG)** and pray **(REG)** and rest in the toilet **(REG)** and when you feel that you are fine, take a sip of water **(REG)** and then you mix with them again **(REG).**
I	Okay is that what you do to calm down you know. just go into another room go pray and just,
R	Drink water **(REG).**
I	And just to because you don't want this to upset you. Ja, and what do you do you feel that the patients or do you feel any emotions towards the patients you know have any accidents happened at the work towards the patient.
R	With the patients **(SD)**.. I am not working with critical patients **(SD)**. I am just working with in and out patients **(SD)**.
I	Hmm.
R	In the occupational health department **(SD)**.
I	Yes yes.. So, now do you feel as if you are being treated unfairly now, in that department? You know with everybody, you know, the gossiping. And do you feel that they are sitting on your head and they are not allowed, they mustn't do that.
R	You know what, I think that that is not the right way of living with people **(AP)**. You can't use the computer **(SD)** ne **(INT/VEX)** and the cords there **(SD)**. I don't know the

	use of that **(SD)**. So when you don't know then you ask me, you know do I use the computer **(SD)**. I don't use it **(SD)**. You are the person who is supposed to know **(SD)**.
I	Yeah.
R	So, what do you expect from me to say **(SD)**. If you say this and that **(SD)**, hmm **(INT/VEX)**.
I	Ja.. How do you feel when people come to you?
R	Hmm **(INT/VEX)**..
I	How do you feel when people come to you with these questions and you like but what must I do now?
R	Who, the patient? **(UNC)**
I	No how do you feel? Do you feel angry because you are like but what am I to do now?
R	I have decided to move out of the department **(AB)**. I told the matron that I don't want to work there anymore **(SD/AP/SF?).** It is enough now **(AP?).**
I	Yeah and have you moved out are you in another department?
R	No, I told her yesterday **(SD)**. So, she is, maybe she is going to present it on Monday **(SD)**.
I	Hmm.. To the people there. Ja..
R	Because I have been presenting it to the other senior sister, with the IP sister **(SD)**. So **(UNC)**. So, I have been telling her, telling her, and now I went to the matron, the quality matron **(SD)**.
I	Yeah. Because you are not very happy there in that department.
R	Department.. When you work with people, you can't just open the cupboards **(SD)**. We normally place our bags there **(SD)** ne **(INT/VEX)**, all of us **(SD)**. So I have decided to move out of that office **(SD)**, ne **(INT/VEX)**. I am using their other office **(SD)**. Where they normally take the vitals **(SD)**. So when they come, they just lock that room **(SD)**. When I was still in the office, you used to go and open the cupboard because my lunch bag was there **(SD)**. Not knowing the reason, but ever since I have removed my lunch bag **(SD)**. She doesn't open the cupboards anymore **(SD)**. She has been asking me about the extension cord for the past two week **(SD)**. Now this week, when I want home, I have found that they have broken my, I am staying in a shanty, they broken the burglar **(SD)**. They have taken the TV **(SD)**, they have taken the wash basin **(SD)**, they have taken Television **(SD)**, the radio speakers, the stove, the kettle **(SD)**. I don't have a kettle **(SD)**. The rice was in a container, they have token all those stuffs **(SD)**. So I don't have them **(SD)**. The previous time they took the oven, they took six blankets, two dvd radios, they took what again the basket, the washing **(SD)**. So this time they took the linen, the curtains, and the linen from home chest **(SD)**. I got myself ne **(INT/VEX)** two pairs of linen that is that of the jewellery set **(SD)**.