

CHAPTER 1

INTRODUCTION

1.1 Introduction

The personal cost of caring for people with chronic conditions and terminal illnesses may cause emotional distress in nurses. This is an important concern that affects palliative-care providers who offer critical services to individuals suffering from chronic and terminal illnesses, and their families. As service providers, nurses are usually involved in palliative care. Nurses work in the human-service sector, and their work is characterised by high levels of stress, burnout and associated factors. In the health-care sector, the relationship that exists between the nurse and the patient, in conjunction with organisational resources and support, determines the quality of the care given to the patient. This relationship often becomes personal when people (nurses and patients) become emotionally attached to one another. Hence, providing care in these situations may put a damper on the nurses' emotional well-being.

The study aimed to investigate the emotional well-being of nurses working in palliative care. The difference between palliative-care nurses and general-care nurses lies in the type and level of care they provide. Palliative care "seeks to prevent, relieve, reduce or soothe the symptoms of disease or disorder without effecting a cure" (Selecky, Eliasson, Hall, Schneider, Varkey & McCaffree, 2005, p. 3599). Thus, palliative-care nurses concentrate on reducing the severity of disease symptoms rather than on aiming at curing the disease or reversing its progression. From this definition, palliative care is not only associated with individuals who are dying or those who reside in hospices, it is broader than that. The goal is to prevent and relieve suffering and to improve the quality of life of those people who are facing serious illnesses (Selecky et al., 2005; Twycross, 1999). General-care nurses, on the other hand, are required to care for patients by

lessening the severity of disease and pain symptoms with the aim of curing their patients.

The exposure of nurses to human suffering is common in palliative-care departments. Nurses may experience negative effects after caring for terminally ill patients, and as a result of having compassion for patients with physical or psychological distress (Dominguez-Gomez & Rutledge, 2009). Nurses who exhibit signs of secondary traumatic stress would not be in a position to offer the best quality of service to their clients. This may impact on the lessening of symptoms or the recovery of the patient or patients. However, there is a severe lack of research that was undertaken about the efficacy of palliative-care in South Africa (Campbell, 2011). This study sought to contribute to the under-researched area of palliative care in this country.

This study sought to address the gap in knowledge in terms of nurses' experience of secondary traumatic stress, emotional exhaustion, empathy, organisational commitment and sense of coherence among palliative-care nurses in Johannesburg. Therefore, this study proposed that palliative-care nurses are more vulnerable to the development of emotional distress at work than general-care nurses in this city.

1.2 Structure of the research report

The main purpose of the first chapter is to provide an introduction and framework to the study. An outline of the chapters that are to follow is given below.

Chapter 2 reviews literature on the theoretical framework of the study. It outlines what is to be understood by emotional well-being, and defines palliative care. It further discusses the key variables of the current study, thereby exploring the underpinnings of

secondary traumatic stress, empathy, emotional exhaustion, affective and continuance commitment and sense of coherence. It ends by stating the aim of the study.

Chapter 3 describes the methodological processes of the study. It discusses the manner in which the research was conducted. It presents the research design, research question, hypotheses, sample, procedure, the statistical analyses and the ethical considerations of the study.

Chapter 4 reports on the results of the study. It presents the results of the statistical analyses that were run on collected data. This chapter presents the internal reliabilities of the various scales, the means, standard deviations, F -value and p -value that stemmed from the ANOVA output, and the r -Value and p -value that were derived from correlational analysis.

Chapter 5 presents the discussion of results. The research findings are outlined and analysed critically. The limitations of the study, suggestions for future research and conclusion are included in this section.

CHAPTER 2
LITERATURE REVIEW:
THEORETICAL AND CONCEPTUAL BACKGROUND

2.1 Emotional well-being

Emotional well-being is a construct that has been widely researched in recent years. Together with life evaluation, emotional well-being is one of the two aspects of personal well-being. This concept does not refer to the absence of emotions, but, it refers to nurses' ability to understand the value of their emotions and how they can use these emotions to move forward in life (Fredrickson, 2000; Stewart-Sicking, 2009; Wright, 2003). Similarly, Stewart-Sicking (2009) defines emotional well-being as "subjective well-being, the experience of relatively high levels of positive emotions and low levels of negative emotions, along with a sense that one's entire life has been well-lived and satisfying" (p. 97). In this regard, emotional well-being among nurses refers to having the capability to balance the positive and negative emotions within their working environments. The nursing environment is highly characterised as being stressful, and the nurses' ability to focus on providing the best quality of care to their patients, and not focusing on the negative aspects of traumatic situations, will maximise their experience of pleasure and minimise that of pain, thus building their emotional well-being (Fredrickson, 2000).

Emotional well-being focuses on the nurse's strengths, rather than drawing all their attention to the fixing of problems or concentrating on their weaknesses (Fredrickson, 2000). This statement is crucial to health-care personnel, as their capabilities and sense of stability impact greatly on the quality of patient care. Greater levels of emotional well-being within palliative-care nurses are highly sought after, as they are perceived to contribute to increased coping ability, self-esteem, performance, productivity at work, and may even add to longevity (Fredrickson & Joiner, 2002). Thus, the better nurses are able to master their emotions, the greater their capacity to cope with stress, enjoy

life, and focus on important work and personal priorities. However, on the other hand, low levels of emotional well-being relate to issues such as stress, anxiety, depression, burnout, fear and anger (Wright & Cropanzano, 2004). Furthermore, a nurse's emotional well-being could deteriorate, resulting in digestive disorders, sleep disturbances and low levels of work motivation (Martin, 2005).

In terms of the advantages of enhancing a nurse's emotional well-being, Fredrickson and Joiner (2002) highlight how the Broaden-and-Build Theory of positive emotions predicts that positive emotions broaden the scopes of attention and cognition, and as a result initiate upward spirals towards increasing emotional well-being. A brief summary of this theory will be outlined below. This theory is relevant to the study of nurses' emotional well-being because it outlines how nurses can build lasting personal resources, and widen their array of thoughts and actions to enable them to act in a particular way when found in life-threatening or traumatic situations (Fredrickson, 2000; Wright & Cropanzano, 2004). The way nurses react when exposed to traumatic situations can impact on their emotional well-being, because if they tend to dwell on the negative aspects, they are at risk of being secondarily traumatised and thus being hampered in achieving emotional well-being.

2.1.1 The Broaden-and-Build Theory of Positive Emotions

Fredrickson (2000) developed a model to better elaborate the unique attributes and potential contributions of positive emotions (Wright, 2003). The Broaden-and-Build Theory of Positive Emotions states that positive emotions "share the ability to broaden an individual's momentary thought-action repertoires through expanding the available array of the thoughts and actions that come to mind" (Wright & Cropanzano, 2004, p. 348). Furthermore, the theory explains how positive emotions can help in building an individual's personal resources in terms of endurance, stretching from the physical to the social nature, and how experiencing the positive can enable an individual to prosper mentally, flourish and grow psychologically (Fredrickson, 2000; Wright, 2003).

It has been established that human capital, and more recently, positive psychological capital, is the most valued asset to any organisation (Luthans, Luthans & Luthans, 2004). Nurses` intention to remain within their respective organisations largely depends on their psychological and emotional well-being. Although extrinsic rewards are highly favoured, intrinsic rewards are also important. Taking the Broaden-and-Build Theory into consideration, both palliative-care and general-care nurses could be trained to develop positive emotions at work. This could help them to become creative, resilient and socially connected, and add to their mental and physical health (Wright, 2003; Wright & Cropanzano, 2004). This development in nurses, especially palliative-care nurses could help them cope with the pressures and stress of their work roles by providing them with personal resources.

The improvement in personal resources is a result of a sustained focus on positive emotions. Further focus on positive emotions could enhance the nurse's character development and emotional well-being. This is evident from the work of past organisational researchers who investigated the moderating effect of positive emotion on job satisfaction and job performance, and found a significant positive relationship (Luthans, 2002). The caring role of a nurse may be emotionally taxing. However, if nurses were able to adapt their positive emotions within their work roles, they could become emotionally rational, satisfied, and provide efficient care for their patients.

According to Wright (2003), a sustained focus on positive emotions may result in a potentially moderating upward spiral effect, which may further enhance a nurse's character development and emotional well-being. It makes nurses more proactive and thus they become less prone to stress symptoms. They are also able to appreciate current life circumstances, and thus integrate these circumstances into new views of the self and the world (Fredrickson, 2000; Wright, 2003; Wright & Cropanzano, 2004).

The Broaden-and-Build Theory thus outlines the importance for nurses, especially palliative-care nurses to have positive emotions and perceptions about their surroundings. Nurses work in unpredictable environments and thus need to focus on the positive to be able to provide the most effective quality of care to their patients, instead of looking out for the negative. Palliative nurses, in particular, are constantly exposed to traumatic material, and this is enhanced by the empathic relationship formed with their patients, the patient's family and the community at large (Deville, Wright & Varker, 2009). Being able to balance their emotions, nurses learn to be emotionally, mentally and physically healthy, and thus provide patients with the best quality of care and support. Nurses will also become more resilient, and have the ability to bounce back from exposure to traumatic situations. Through positive emotions, nurses build their personal resources, which enable them to endure traumatic events, and develop effective coping strategies (Fredrickson, 2000; Wright, 2003). Furthermore, this theory shows that nurses are able to achieve optimal well-being. They are able to build their psychological and physical well-being, which ultimately builds their emotional well-being.

2.2 Palliative care

Palliative care is "the active total care of patients and their families by a multi-professional team at a time when the patient's disease is no longer responsive to curative treatment and life expectancy is relatively short" (Twycross, 1999, p. 2). This type of care aims at lessening symptoms, relieving pain and suffering, and improving the quality of life for patients with chronic and terminal illnesses (Brunnhuber, Nash, Meier, Weissman & Woodcock, 2008; Faull, Carter & Woof, 1998). In addition, palliative care also aims to provide support to the patient and the patient's family. Similarly, hospice and palliative care are defined as "a concept of care which provides coordinated medical, nursing and allied services for people who are terminally ill, delivered where possible in the environment of the person's choice, and which provides physical, psychological, emotional and spiritual support for patients and for patients'

families and friends” (Ashby, Kissane, Beadle & Rodger, 1996, p. 47). Hospice care is often used as a synonym for palliative care; however, in some countries hospice denotes community-based palliative care (Twycross, 2005).

Palliative care was generally received by patients who had cancer and oncology-related illnesses (Ashby et al., 1996; Parker & Hodgkinson, 2011). Over the past years, patients with HIV/AIDS have also been categorised as patients who could benefit from palliative care (Allen & Marshall, 2008; Campbell, 2011). However, Mahtani-Chugani et al. (2010) argue that according to the World Health Organisation (WHO), chronic organ failure conditions were also amongst the greater causes of death in comparison with cancer, and henceforth, patients with such a chronic illness should also receive palliative care. Similarly, Parker and Hodgkinson (2011) outline how palliative care in a long-term situation will be important for patients with non-cancerous or oncology-related diseases. Although cancer and HIV/AIDS may account for a greater number of deaths, other long-term life-threatening diseases, such as Heart Failure, Multiple Sclerosis, Alzheimer’s, Renal Failure, Liver Failure, Chronic Respiratory Diseases and other chronic illnesses, also account for a major percentage of deaths (Mahtani-Chugani et al., 2010). According to Allen and Marshall (2008), the growing prevalence of chronic illness among vulnerable populations such as Johannesburg, continues to place heavy demands on the health-care system. These demands are often met with a lack of adequate resources.

Through their studies, Mahtani-Chugani et al. (2010) acknowledged that non-oncological diseases have shown to have a significant impact on the quality of life of patients. Cancer, as well as HIV/AIDS and chronic illness are characterised by progressive and remissive stages that will eventually lead to a fatal stage where support for the patient and the patient’s family is required. Thus palliative care should not only be restricted to cancer patients, but patients who are infected with HIV/AIDS and patients with chronic illness could also benefit from it (Campbell, 2011). Although patients with cancer and other terminal diseases are the individuals who predominately

receive palliative care, this form of care has recently been extended to now being available to patients with non- oncology-related or chronic illness (Allen & Marshall, 2008; Mahtani-Chugani et al., 2010). There has thus been a shift, and there is now a broader understanding of the intentions of palliative care and the benefits it could bring to all patients. However, chronic illnesses can present challenges to palliative health-care personnel.

Palliative care can be considered as consisting of three essential components that are outlined in Figure 1 below:

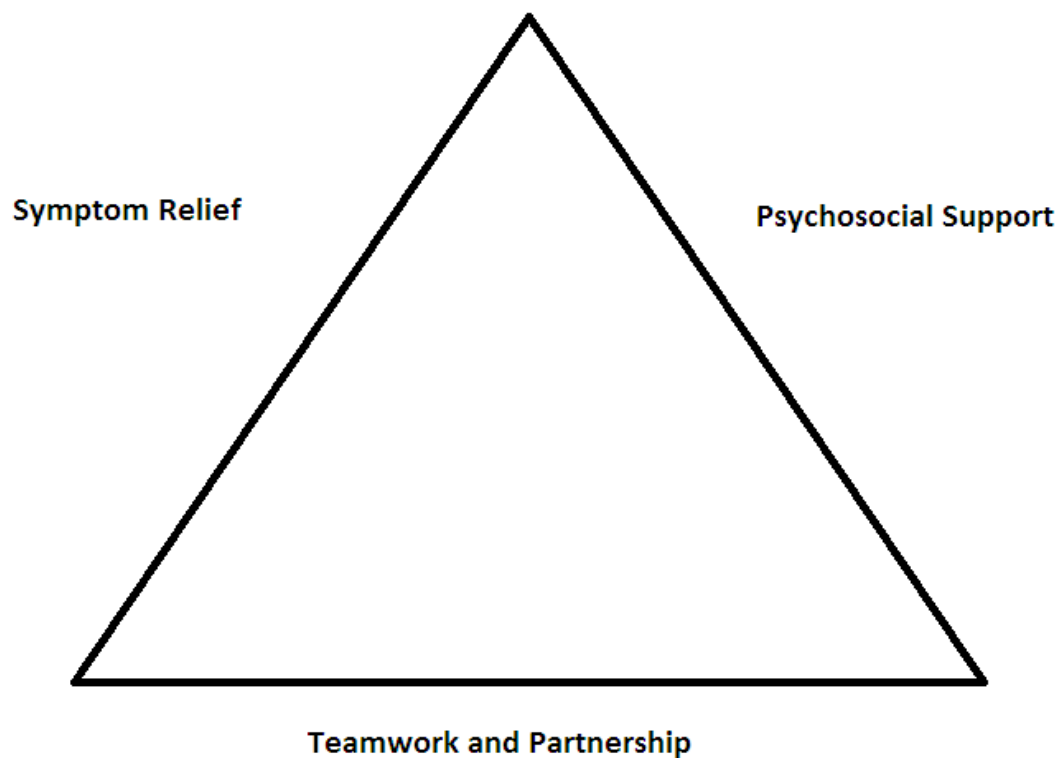


Figure 1. Three essential components of palliative care: Adapted from (Twycross, 1999, p. 2)

The three essential components of palliative care are considered to be symptom relief, psychosocial support, and teamwork and partnership (Twycross, 1999; Twycross, 2005). The above three essential components are bound together by skilled communication. This communication embodies hope, openness and honesty (Twycross, 2005). It is important that there must be efficient communication between the nurses, the patient and the family. Good communication is essential for effective palliative care (Brunnhuber et al., 2008). In accordance with the above, Faulkner (1998) and Twycross (1999) outline the increasing awareness of the need for effective communication amongst nurses and patients who are facing life-threatening illnesses. According to Brunnhuber et al. (2008), effective communication would require the palliative nurse to prepare for the encounter, create a supportive environment for the patient and their family, actively listen and being aware of non-verbal behaviour, and show empathy. Thus, communication builds trust between the nurse, the patient, and the family, so that no ambiguity exists in terms of what is best for the patient and his or her quality of life.

However, it is important to note that a great deal is expected from palliative-care nurses as they have the responsibility of communicating bad news to terminally ill patients and their families. Brunnhuber et al. (2008) outline how any bad news in a palliative-care setting may be followed by acceptance or denial, and that the appropriate procedures and strategies for either of these outcomes need to be anticipated and prepared for. As hard as it may be to share bad news about a dying person's health, communication needs to be honest and open in palliative care, because in the absence of effective communication, effective and efficient interaction between the patient and nurse is unlikely to be present (Faulkner, 1998; Faull et al., 1998). In addition, Faulkner (1998) points out that miscommunication within a team contributes to the high emotional costs of caring that is characterised in palliative-care nurses. Thus it is clear how communication can have an effect on a nurse's emotional well-being, because lack of proper communication causes misunderstanding, failure to have adequate resources supplied, and failure to have the necessary coping strategies in place.

The three essential components of palliative care will be discussed briefly.

2.2.1 Symptom relief

Through symptom relief, the goal of palliative care is to reduce the severity of disease or illness symptoms in patients (Ashby et al., 1996; Brunnhuber et al., 2008; Faull et al., 1998; Selecky et al., 2005; Twycross, 1999; Twycross, 2005). This relief aims at relieving suffering, and thereby allowing the patient to manage the pain. Through this process, nurses need to evaluate and alleviate their patient's physical, psychological, and social distress.

2.2.2 Psychosocial support

There is more to palliative care than only symptom management (Selecky et al., 2005; Twycross, 1999). It goes beyond the symptoms of the patient, all the way to helping the family cope as well (Brunnhuber et al., 2008; Simoens et al., 2010). Thus, issues such as the broader impact of the illness and the death of the patient on the families need to be considered and addressed (Brunnhuber et al., 2008; Twycross, 2005). Brunnhuber et al. (2008) refer to this as "psychosocial care", and they state its importance for the patient and the family. Psychosocial support is needed by all patients and families, as it may promote psychological and emotional well-being, as well as physical and mental development. In addition, Brunnhuber et al. (2008) point out that nurses themselves also require a form of psychosocial support, as most interventions are focused on decreasing their workload or improving their coping skills, without addressing the stressful issue of having to help and see their terminally ill patients die.

Ashby et al. (1996) and Twycross (1999) state that in terms of psychosocial support, palliative care responds to physical, psychological, social and spiritual needs. It may even go as far as nurses providing the necessary support in bereavement situations.

Thus, palliative-care nurses need to be caring, attentive and creative within their line of work, as they need to provide care and guidance to the physical, emotional, psychosocial, and financial needs of the patient and the family (Allen & Marshall, 2008). Stemming from the role of psychosocial support, it is evident that palliative-care is more person-centred, as it provides care, support and comfort to patients during the last stages of their disease or illness (Faull et al., 1998; Simoens et al., 2010). This care helps them in overcoming challenges, building coping mechanisms and re-establishing trust and hope for the future.

2.2.3 Teamwork and partnership

Palliative care is best administered in a group of people working together, as the well-being of the patient and the family becomes a collective concern (Faull et al., 1998; Mahtani-Chugani et al., 2010; Twycross, 2005). Nurses and doctors need to work together and support each other in order to make sure that they offer their patients the best quality of care. As stated before, palliative care is not about cure, but about lessening the pain of individuals, and thus health professionals who are working as cohesive teams benefit palliative care patients as they are surrounded and cared for by a large and caring health workforce (Twycross, 1999). This cohesive team also aims at offering a supportive structure to help the patient's family cope during his or her illness, as well as at his or her bereavement (Faulkner, 1998; Twycross, 1999; Twycross, 2005). The team can also consist of health staff, volunteers, extended family and the community at large. Both the patient and the family will benefit from symptom relief, psychosocial, spiritual and emotional support, and a unified interdisciplinary team of care providers.

In addition, partnership is also considered an integral part of palliative care. The relationship that is formed between the nurse, and the patient and his or her family is pivotal in palliative care. This partnership ensures that the patient gets overall effective care and support. Mutual understanding, respect, shared goals, care and treatment

contribute to the patient's quality of health and life. However, according to Mahtani-Chugani et al. (2010), a lack of shared understanding about the goals of care can lead to resistance, where the family and the nurses do not agree on what the best step forward is for the patient's health. This can further lead to threats of legal action, while the quality of life and health of the patient suffers.

Thus, through this model, palliative care aims at improving the quality of life of terminally ill patients by focusing on the relief of pain and symptoms, taking into account the psychological, social and spiritual needs of the patients, and by adopting a holistic, non-curative approach that involves the cooperation and collaboration of the nurses and the patient's family (Simoens et al., 2010; Twycross, 1995).

With reference to Twycross's (1999) three essential components of palliative care, it can be deduced that there is a negative relationship between palliative care and the costs that hospitals could incur. Penrod et al. (2010) conducted a study to evaluate the relationship between palliative-care consultation and hospital costs in patients with advanced diseases. Their motivation to do this study was based on the increasing number of palliative-care consultation teams that were becoming apparent in hospitals, and because less was known about the effects of palliative care on hospital costs (Penrod et al., 2010). Through the sample of 606 veterans who had received palliative care and 2 715 who had received general hospital care, it was found that palliative care during hospitalisation was associated with significantly lower direct hospital costs.

Stemming from the study of Penrod et al. (2010), the researcher outlined the important notion of palliative care being less expensive than general care. Taking into account the goals of the two types of care, where general care aims to cure and palliative care aims to lessen symptoms and pain, it could easily be established why Penrod et al. (2010) obtained the findings they did. Furthermore, Mahtani-Chugani et al. (2010) outlined another distinctive difference between the two types of care that could add

enlightenment on the findings of Penrod et al. (2010) and the foundations of this study. General-care nurses normally do not have training in palliative care, since they have been trained for curing, but not for caring. Providing a cure thus costs more than caring, and it is no wonder that more health institutions want their general-care nurses to adopt a more palliative-care approach in terms of caring when looking after their patients (Mahtani-Chugani et al., 2010; Penrod et al., 2010). This does not imply that a curative approach is inadequate, but a more holistic approach to caring that includes palliative-care initiatives will be more beneficial to the patient's quality of life, and it will reinforce his or her support and belief structures.

2.3 Secondary traumatic stress

Palliative-care nurses provide care, as well as compassion for their patients. This care goes way beyond the average care that general nurses could give to their patients, and thus palliative nurses tend to become more involved emotionally. The physical, emotional and cognitive consequences of this caring attachment may produce negative consequences and effects on nurses' health, which may be referred to as compassion fatigue or secondary traumatic stress (Dominguez-Gomez & Rutledge, 2009).

Compassion fatigue was described as a unique form of burnout, but it was later further explained as the emotional stress experienced from the trauma of someone else (Dominguez-Gomez & Rutledge, 2009). Similarly, secondary traumatic stress refers to exposure to a person who is traumatised or suffering, and eventually the person providing the care would also become traumatised in the process of providing care (Deville et al., 2009; Dominguez-Gomez & Rutledge, 2009).

Research literature describes the adverse impact of working with clients who have a history of trauma by the use of various terms, namely, vicarious traumatisation (VT), counter transference (CT), secondary traumatic stress (STS) and compassion fatigue (CF) (Deville et al., 2009; Dominguez-Gomez & Rutledge, 2009; Figley, 1995; Benoit, Veach & LeRoy, 2007; MacRitchie & Leibowitz, 2010; Nene, 2005). Similarly, Figley

(1995) uses concepts such as compassion stress, compassion fatigue and secondary stress interchangeably. It is argued that the term “compassion fatigue” could be a more preferable term to describe emotional distress than the term “secondary traumatisation” because people often associate secondary traumatic stress with pathology (Figley, 1995; Harinarain, 2007; Macritchie, 2006). However, Macritchie (2006) and MacRitchie & Leibowitz (2010) state that, when compared with compassion ftigue, secondary traumatic stress is a better term to use as it is broader and therefore more specific. Thus, the current study will make use of the term secondary traumatic stress, as it has been used by many other contemporary authors (Bride, Robinson, Yegidis & Figley, 2003; Devilly et al., 2009; Dutton & Rubinstein, 1995; MacRitchie & Leibowitz, 2010).

According to Dutton and Rubinstein (1995), reactions to secondary traumatic stress are very common, and they may occur regardless of race, gender, age or level of training. Thus, secondary traumatic stress may occur in any individual who is exposed to traumatic situations despite his or her background. However, it should be noted that not every individual who is exposed to a traumatic situation will experience secondary traumatic stress. In most cases it will develop in individuals who have an emotional connection with the traumatised person (Dutton & Rubinstein, 1995; Figley, 1995).

Dutton and Rubinstein (1995) and Figley (1995) explain how the post-traumatic reactions that result from direct exposure to traumatic material, namely reactions to secondary traumatic stress have been classified under the concept of post-traumatic stress disorder (PTSD). Just like secondary traumatic stress, PTSD is the outcome that an individual may experience if he or she has been exposed to a traumatic stressor (Devilley et al., 2009; MacRitchie & Leibowitz, 2010). Therefore this implies that the diagnostic symptoms of secondary traumatic stress and PTSD are generally similar; if not the same. In addition, nurses or trauma workers who experience secondary traumatic stress show signs of intrusion, avoidance and arousal (Bride et al., 2003; Dutton & Rubinstein, 1995; Figley, 1995).

The above symptoms, namely, intrusion, avoidance and arousal, form the subscales for the Secondary Traumatic Stress Scale (Bride et al., 2003). Intrusion symptoms revolve around nurses having flashbacks and nightmares of the traumatic situation. With arousal, nurses may have difficulty concentrating and occasionally have angry outbursts, while with the avoidance symptom, nurses may experience psychic numbing or amnesia in an effort to try and avoid the traumatic experience (Dutton and Rubinstein, 1995). The existence of these symptoms in secondary traumatic stress is evidence of the fact that it is similar to PTSD, as these very same symptoms are found in PTSD (Devilley et al., 2009; Dutton & Rubinstein, 1995; Figley, 1995). The only difference between PTSD and secondary traumatic stress is that PTSD is direct and secondary traumatic stress is indirect (Figley, 1995; MacRitchie & Leibowitz, 2010). In addition, Devilly et al. (2009) also outlined that the shift from PTSD to the development of secondary traumatic stress, was due to the broadening of the definition of traumatic event to include “witnessing or hearing about threatened death or serious injury occurring to another individual” (p. 374).

Research on secondary traumatising relies heavier on Figley’s model of emotional distress (Figley, 1995). Figley (1995) developed a trauma-transmission model which incorporates concepts of traumatic stress, interpersonal relationships and burnout. This model consists of two parts, namely, a model of compassion stress and a model of compassion fatigue. This model attempts to explain the process of trauma transmission and account for the reasons why some people develop secondary traumatic stress or compassion fatigue, as it is referred to in the model (Dutton & Rubinstein, 1995; Figley, 1995). The model revolves around the notion of empathy and other factors such as a nurse’s behaviour towards the victim, exposure to trauma, a sense of satisfaction derived from helping, and the ability of the nurse to disengage from the process (Figley, 2003; Macritchie, 2006). The empathic concept comes into play when the nurses try to understand patients by identifying with them. They may therefore go on to experience effects that are similar to those of the patients. Figley’s model will be discussed in detail later.

Figley's (1995) theory of secondary traumatic stress, maintains that individuals such as health-care workers are particularly at risk of developing secondary traumatic stress, as they come into direct contact with victims of traumatic situations, and do so on an ongoing basis. Research in this area is minimal and limited (Macritchie, 2006; MacRitchie & Leibowitz, 2010). Thus the concept was found relevant to this study because it could contribute to its understanding in different contexts in terms of healthcare. Nurses are greatly at risk of developing secondary traumatic stress. Knowledge of this stress factor among nurses could help health-care organisations to provide a better working environment for nurses. This knowledge is critically important in helping nurses to develop coping mechanisms.

2.3.1 Theoretical models of secondary traumatic stress

Quite a few researchers and authors have developed theoretical models in an effort to explain the nature and progression of secondary traumatic stress. However, only two theoretical models of secondary traumatic stress were used in the current study. This study focused on Figley's (1995) "Trauma Transmission Model" and Dutton and Rubinstein's (1995) "Model for secondary traumatic stress reactions", as they are the two most widely used models within the trauma sphere.

2.3.2 Trauma-transmission model

As previously mentioned, Figley developed this two-part model (model of compassion stress and model of compassion fatigue) by incorporating aspects of traumatic stress, burnout and interpersonal relationships (Figley, 1995). This model attempts to explain the process of trauma transmission, and account for the reasons why some people develop secondary traumatic stress.

The model outlines that secondary traumatic stress occurs through the psychological mechanism of empathy and identification (Benoit et al., 2007; Devilly et al., 2009). The empathic engagement with the patient and exposure to traumatic situations causes secondary traumatisation in nurses. The study of secondary traumatisation is highly relevant to the South African nursing community and the nation at large because such studies raise awareness in the public about nurses' emotional and psychological well-being (MacRitchie & Leibowitz, 2010). Secondary traumatisation in nurses is worsened when nurses emotionally engage with questions such as the following:

What happened?

Why did it happen?

Why did I act as I did then?

Why have I acted as I have since?

If it happens again will I be able to cope?' (Figley, 1995).

According to Dutton and Rubinstein (1995) and Macritchie (2006), nurses attempt to answer these questions for the patient in order to adapt to their traumatising work situations. It is as a result of this experience between the nurse and the patient that nurses are going through emotional difficulties. Through identification with the patient nurses also become exposed to secondary traumatisation, and may become aware of the reality that the same could also happen to them (Deville et al., 2009; Figley, 1995).

The first component of the trauma-transmission model illustrates the onset of compassion stress. This is described as a function of the following six interacting variables:

- Empathic ability
- Empathic concern
- Emotional contagion
- Empathic response

- Disengagement
- Sense of achievement
- Compassion stress, (Benoit et al., 2007; Figley, 1995)

As confirmed by Devilly et al., (2009) the main aspects of this model are identification and empathy. Figley (1995) divides them into three categories, namely empathic ability, empathic concern and empathic response. According to Benoit et al. (2007), empathic ability is related to the nurse's ability to recognise and sense the pain of others, to show unconditional positive regard and genuineness. Hence, within the nursing profession; especially in palliative care, the concept of empathic ability is linked to empathic concern, which forms the motivation for responding to patients. Empathic response is the combination of a nurse's empathic ability and empathic concern. It measures the level of effort put forth by the nurse; more specifically a palliative-care nurse, in assisting his or her patients in managing the pain and mitigating their suffering through empathic understanding (Benoit et al., 2007; Figley, 1995).

Emotional contagion is "a process in which a person or group influences the emotions or behaviour of another person or group through the conscious or unconscious induction of emotional states and behavioural attitudes" (Barsade, 2002, p. 646). From another perspective, Hatfield, Cacioppo, & Rapson (1993) see emotional contagion as "a tendency to automatically mimic and synchronise facial expressions, vocalisations, postures, and movements with those of another person and, consequently, to converge emotionally" (p. 153). Figley (1995) simply describes the term as "experiencing the feeling of sufferers as a function of exposure to the sufferer" (p. 252). Thus nurses; either palliative or general, could have emotions that are similar to those of their patients.

Throughout the rest of the model, this connection of empathic ability, empathic concern and emotional contagion subsequently results in the formation of compassion stress (Benoit et al., 2007; Figley, 1995). If nurses are unable to disengage or feel a sense of

comfort after providing care for their patients, they will proceed to develop compassion stress. Compassion stress is defined as “the stress resulting from helping or wanting to help a traumatised person” (Figley, 1995, p. 16). Similarly, it is the stress that nurses may develop from helping their traumatised patients, although it is not pathological (Devilly et al., 2009). However, if the nurse can disengage from the relationship with the patient, a sense of satisfaction, rather than experiencing the stressful effects of working with the patient’s traumatic material will be experienced (Benoit et al., 2007; Figley, 1995).

The second component of Figley’s (1995) trauma-transmission model outlines the way in which the development of compassion fatigue is a result of four interacting factors, namely, the level of compassion stress, prolonged exposure to the patient, traumatic recollections and the degree of life disruptions. Figley (1995) explains that prolonged exposure to traumatic material occurs as a result of the nurses’ feeling that they continuously have to be responsible for their patients, and take care of them. Palliative-care nurses, in particular, may identify with this to an immense extent, because they deal with the aftermath of a traumatic event, and thus they have long-term interaction with traumatised patients (Dutton & Rubinstein, 1995). In the same vein, general-care nurses are also exposed to the aftermath of a traumatic situation, and they may consider themselves compelled to extend the period of patient care because they may perhaps identify with the victim. It is during this time that the nurse may feel that he or she is the only one who is responsible for the patient, and thus he or she is unable to reduce the level of compassion stress.

Taking into account the level of traumatic content, recollections may cause secondary symptoms, secondary traumatic reactions and other related responses such as anxiety and depression (Benoit et al., 2007). Figley (1995) states that the onset of compassion fatigue is automatic when these circumstances occur, and that it thus becomes a natural phenomenon. In this regard compassion fatigue is referred to as a form of caregiver burnout (Devilly et al., 2009; Dominguez-Gomez & Rutledge, 2009). It is the

researcher's belief that nurses, especially palliative-care nurses are exposed to a great extent to the factors outlined above.

Although Figley's (1995) trauma-transmission model provides a handy and useful theoretic framework for understanding the development and onset of secondary traumatic stress, it has, however, been criticised for being too complex and narrow in its focus (Kleber & Brom, 1992; Macritchie, 2006; MacRitchie & Leibowitz, 2010).

Another model that provides a theoretical framework for secondary traumatic stress is that of Dutton and Rubinstein (1995). This model formed the basis of this study.

2.3.3 Dutton and Rubinstein's theoretical model for secondary traumatic stress reactions (Dutton and Rubinstein, 1995)

Dutton and Rubinstein (1995) developed a model for secondary traumatic stress reactions which integrates aspects of Figley's model. Secondary traumatic stress (STS) reaction is a term that describes the response by doctors, nurses, family members and friends of the patients who have undergone traumatic events (Dutton and Rubinstein, 1995). Thus, the word reaction is used instead of disorder, to emphasise the less pathogenic outcome of traumatisation as compared to PTSD. Dutton and Rubinstein's (1995) model is said to provide a further conceptual development of secondary traumatic stress, because it also incorporates features relating to secondary traumatic stress that were assumed to be lacking from Figley's (1995) trauma-transmission model (Harinarain, 2007; Macritchie, 2006; MacRitchie & Leibowitz, 2010). This is in inference to the environmental, cultural and personal factors that are not incorporated in Figley's (1995) model, but which are considered to be important in secondary traumatic stress formation, as they can act as mediators.

There is an array of reactions that nurses may experience as a result of their work and interaction with patients. According to Dutton and Rubinstein (1995) these reactions are categorised into the following three areas:

1. "Indicators of psychological distress
2. Changes in cognitive schema
3. Relational disturbances" (p. 85).

The first category relates to the symptoms of psychological distress or dysfunction, that is, distressing emotions such as sadness and depression, intrusive imagery such as nightmares and flashbacks by the nurse exposed to the traumatic material, and avoidance efforts in working with traumatising material (Dutton & Rubinstein, 1995). These are but some of the symptoms that are indicators of secondary traumatic stress. Further symptoms include somatic complaints such as headaches and sleep deprivation, addictive or compulsive behaviour, impairment in day-to-day functioning in personal and social roles and physiological arousal (Dutton & Rubinstein, 1995; Geldenhuys, 2006). Accordingly, this may relate to the understanding of secondary traumatic stress, as these responses refer to the symptoms one may experience when exposed to traumatic material.

The second category of reactions that the nurses may experience refers to shifts in assumptions and beliefs about the world, namely, changes in cognitive schemata (Dutton & Rubinstein, 1995; Janoff-Bulman, 1985; McCann & Pearlman, 1990). Owing to exposure to traumatic material changes in cognitive schemata, may shift beliefs, expectations and assumptions held by nurses and trauma workers (Geldenhuys, 2006). Nurses have assumptions on a preconscious level which allow them to set goals and activities, and adapt their behaviour in their current work roles. These assumptions are believed to be disrupted by direct or indirect exposure to trauma, which may lead to direct or indirect traumatisation (Dutton & Rubinstein, 1995; Macritchie, 2006; MacRitchie & Leibowitz, 2010). This could further manifest into vicarious traumatisation, which is a result of changes in cognitive schemata owing to indirect or secondary traumatisation.

The third and last category of reactions to secondary traumatic stress is known as relational disturbances. According to Geldenhuys (2006), radical influences on personal and professional relationships may occur. Relational disturbances may occur in the relationship formed between the nurse and patient as a result of miscommunication and mistrust (Dutton & Rubinstein, 1995; Faulkner, 1998). Furthermore, as a result of indirect or secondary traumatisation, nurses' relationships may be affected. With special reference to palliative-care nurses, their work with traumatised patients may spill over into their personal lives and relationships, which may further lead them to isolate themselves while at work (Dutton & Rubinstein, 1995; Macritchie, 2006). This withdrawal may cause "labelling and pathologising the traumatic reaction" (Geldenhuys, 2006, p. 16).

Thus, in terms of these three categories of the nurses' reactions to working with traumatised patients, Dutton and Rubinstein's (1995) theoretical model of secondary traumatic stress reactions consists of four components. These components are:

- "the traumatic event to which the nurse is exposed;
- the nurses' PTS reactions (the nurses' coping strategies in terms of their response to the traumatic situation); and
- the personal and environmental mediating factors pertaining to the nurses' characteristics and the characteristics of the traumatic environment and the recovery environment, respectively" (Dutton & Rubinstein, 1995, p. 89).

Dutton and Rubinstein's model for secondary traumatic stress reactions (Dutton & Rubinstein, 1995) encompassing the four above components is discussed below.

With regard to the first component of Dutton and Rubinstein's (1995) model for secondary traumatic stress reactions, they state that exposure to traumatic material is unique for every nurse who works with traumatised patients. It should, however, be

noted that “it is not just those whose work is dominated by trauma who are affected, but also those who encounter even one experience in which they are exposed to the serious or devastating aftermath of traumatic events” (Dutton & Rubinstein, 1995, p. 89). This implies that, owing to their constant exposure to traumatic events, not only palliative nurses may be affected by trauma, but general-care nurses may also experience the effects of being exposed to even one traumatic situation.

In addition, it ought to be noted that there is a difference in the level of exposure of different health personnel. The exposure to trauma by emergency workers, such as paramedics and firemen, will be different from that of palliative-care or general-care nurses. This is because the emergency personnel’s response can be ascribed to the immediate effects of the traumatic event, whereas with the response of trauma workers, such as palliative-care nurses, it may be due to the prolonged aftermath of the trauma (Dutton & Rubinstein, 1995). Thus, it is evident that trauma workers are more prone to developing secondary traumatic stress than paramedics or emergency rescue personnel. Furthermore, it is not merely the exposure to the traumatic situation that may result in nurses developing secondary traumatic stress reactions, but it also includes the exposure to the patient’s reaction of the traumatic event (Dutton & Rubinstein, 1995; Figley, 1995). Palliative-care nurses’ exposure to their patient’s emotional pain, anxiety, fear and hopelessness can contribute to the development of secondary traumatic stress reactions.

It has been outlined that the nature of the victimisation itself is quite important in understanding a trauma worker’s reaction (Dutton & Rubinstein, 1995). Relevant to palliative-care nurses, the nature and severity of a patient’s illness or disease impacts greatly on the formation of secondary traumatic stress symptoms and on their emotional and psychological well-being. Exposure to the patient’s traumatic situation and the severity of the illness make nurses aware of their patients’ pain, but the nurses also “come to the realisation that a particular traumatic event can occur; has occurred, perhaps repeatedly; and may recur” (Dutton & Rubinstein, 1995, p. 92). It is thus due to

these reasons that a nurse who is exposed to a traumatic situation, even if only once, is likely to be traumatised.

As mentioned previously, nurses often deal with the aftermath of a traumatic situation, and thus the development of secondary traumatic stress is not immediate. Palliative-care nurses, in particular, can be exposed to the traumatic situation for longer periods than general-care nurses because of the long-term care they may be requested to provide to their terminally-ill patients. It is thus the aim of palliative-care nurses to contain the immediate effects of trauma and to stabilise their patients in both a medical and psychological manner (Dutton & Rubinstein, 1995). In doing so, the nurses ensure that they lessen the reactions or effects that could lead to the development of secondary traumatic stress, and this builds their emotional well-being.

Post Traumatic Stress (PTS) reactions are associated with the effects that arise from exposure to a traumatic situation. Nurses may have a range of reactions that may ultimately impact on the development of secondary traumatic stress. Working with traumatised patients, nurses may develop secondary traumatic stress reactions, compassion fatigue, vicarious trauma, burnout, empathic stress, stress and countertransference (Dutton & Rubinstein, 1995; Figley, 1995; Hlengani, 2007). Symptoms of these reactions include anxiety, sleep disturbances, anger, fear, suppressed emotions, flashbacks and so forth (Dutton and Rubinstein, 1995; Figley, 1995; McCann & Pearlman, 1990).

The next component of the model is coping strategies. Coping strategies affect the development and course of secondary traumatic stress reactions (Dutton & Rubinstein, 1995). According to Dutton and Rubinstein (1995), two types of coping strategies can be found, these being personal and professional strategies. Personal coping strategies can be seen as attending to personal needs and developing supportive relationships. Although nurses' primary role is to take care of their patients, they still need to take care

of themselves as well. They need to pay attention to their personal needs, and find ways of coping to be able to remain robust and provide the best quality of patient care. Professional coping strategies are those connected to peer supervision and consultation (Macritchie, 2006; MacRitchie & Leibowitz, 2010). Health management needs to ensure that nurses have the necessary resources and coping initiatives available to them in order to effectively handle the pressure associated with their job. Both personal and professional coping strategies are thus linked to a nurse's social support network. The nursing profession has been characterised as stressful, and health personnel need to work together and support each other so as to be physically, psychologically and emotionally well in order to provide the best service they can to their patients.

Dutton and Rubinstein (1995) also believe that individual and environmental factors may be mediators of secondary traumatic stress. They mediate the nurses' reactions to indirect exposure to the traumatic situations of their patients. Individual factors encompass the nurses' inner strengths and resources, such as high self-esteem, education, training and experience; their vulnerabilities such as emotional insecurity and possible prior trauma history; and counter-transference or the reactions that nurses may have to their patients (Dutton & Rubinstein, 1995). The nurses' level of satisfaction with both their professional and personal lives is also included (Dutton & Rubinstein, 1995; Macritchie, 2006).

Dutton and Rubinstein (1995) consider environmental factors such as social support, an organisation's response to the nurse, the context within which the nurse works and lives, and social and cultural factors to be important in influencing the nurse's reactions to traumatic material (Harinarain, 2007). The role of the social-support structures is of great importance within the health-care environment, because although a nurse may be exposed to high levels of traumatic material and be highly likely to develop secondary traumatic stress, the support they receive from their supervisors or family may counteract any negative outcomes. In addition, cultural and social factors, such as gender, ethnicity and cultural differences, influence the way nurses respond emotionally

to their work and patients (Dutton & Rubinstein, 1995). According to Dutton and Rubinstein (1995), knowing the nurse's cultural and social norms for acknowledging and expressing emotion is very important and beneficial to health management, as they will be able to understand the nurse's responses to traumatic material, and thus provide the appropriate resources and coping strategies.

The last component of the model is the outcome of the relationship between the components that were discussed above, which lead to the development of secondary traumatic stress. The outcome of secondary traumatic stress predicts the negative consequences for nurses, especially palliative-care nurses, when no intervention plans have been set out to assist them in their profession. This may ultimately lead palliative-care nurses to changing the type of care they provide to their patients, or simply leaving the nursing profession.

Based on this model, it is proposed that nurses who are exposed to higher levels of traumatic material within their profession will be at a greater risk of developing secondary traumatic stress, and higher levels of empathy in comparison with general-care nurses. However, this is dependent on the nurses' history of personal trauma and their personal and environmental characteristics. Thus, there is a need for determining the role of individual differences in reactions to potentially emotional-provoking situations. This will hopefully lead to further assistance and the creation of preventive interventions.

2.4 Empathy

Empathy can be understood as the factor that sparks human concern for others, and the glue that makes social life possible (Barclay, 2007; Brunero, Lamont & Coates, 2010). All individuals are capable of feeling emotions that are not their own, and may further have empathic connections to others as this is believed to be a form of human

communication. According to Barclay (2007), the promotion of the caring behaviour that is associated with the empathic connections is considered to be the most important self-regulatory aspect of emotional intelligence.

Today empathy is viewed as fundamentally important in nursing, especially in the effort to create a good relationship between nurse and patient (Bergdahl, Wikström & Andershed, 2007). This is because it is regarded as one of the essential skills that enable health professionals to connect and work effectively with clients. "Empathy involves not only understanding a client's feelings; it involves a level of self-awareness that allows an individual to accurately demonstrate this understanding to the client" (Webster, 2010, p. 87). Thus empathy may be regarded as a communicative ability and a form of professional presence. Therefore the effective use of empathy may be viewed as a vital ability for nurses in palliative care (Bergdahl et al., 2007; Brunero et al., 2010).

Empathy builds trust, and individuals who perceive nurses as empathic feel accepted and valued. This could result in increased quality of treatment for the individuals (Webster, 2010). According to Brunero et al. (2010), positive relationships between empathy and patient responses have been reported by past research studies. These responses encompass the patient's relief from pain and symptoms, improved pulse and respiratory rates, and reduced worrying and distress among the patients. However, MacRitchie & Leibowitz (2010) point out that empathy can act as a paradox, as it may also be a major factor in the transmission of traumatic material from the primary victim to a secondary person. This makes nurses vulnerable to developing secondary traumatic stress.

This empathic skill also has the potential of placing the nurses at risk of developing reactions to the trauma experienced by their patients. It is indicated that the development of distressing symptoms in trauma workers is due to the open-heartedness and open-mindedness of the nurses to the patients, that is, their capacity

for empathy (Benoit et al., 2007; Figley, 1995). Figley (1995) warns that caring for and empathising with traumatised individuals carries risks as well. According to Harinarain (2007), previous studies on compassion fatigue point out that empathy is a key factor in the induction of traumatic material from the primary to the secondary victim.

Empathising with a traumatised individual helps the nurse understand the patient's traumatic encounter, but the nurse may in turn become traumatised himself or herself. This subsequently becomes a source of stress, as it is conceivable that having an emotional connection would increase vulnerability to symptoms of traumatic stress (Regehr, Goldberg & Hughes, 2002)

When focusing on a multidimensional definition of empathy, two aspects of empathy come to the surface, these are cognitive and emotional aspects (Davis, 1983; Regehr et al., 2002; Ward et al., 2009). These will be outlined below.

2.4.1 Empathy is multidimensional

Davis (1983) proposed that empathy is a multifaceted process. Through the development of the Interpersonal Reactivity Index (IRI) it was established that the instrument assesses four dimensions of empathy. These are perspective taking, fantasy, empathic concern and personal distress.

Fantasy is the extent to which individuals can imagine themselves in the same situations as fictional characters (Webster, 2010). Perspective-taking refers to an individual's spontaneity to adopt others' points of view (Davis, 1983). These two dimensions of empathy are considered the cognitive components of the Interpersonal Reactivity Index (Davis, 1980).

The emotional component of the Interpersonal Reactivity Index comprises empathic concern and personal distress. Empathic concern is the extent to which individuals have feelings of concern and sympathy towards others who are in distress (Webster, 2010). Higher levels of empathic concern indicate an ability to feel compassion, warmth and

concern for others (Davis, 1980). Lastly, personal distress assesses the level of an individual's feelings of fear and discomfort, as a result of observing another person's negative experience or interpersonal situations (Davis, 1980). A high level of this dimension indicates poor interpersonal functioning (Webster, 2010). Similarly, Barclay (2007) states that individuals who are prone to personal distress "tend to be lower in self-regulation of emotions, compared to people prone to sympathetic responding, who tend to be highly regulated, yet emotionally intense" (p. 6).

The cognitive process is one in which an empathic individual has the ability to accurately perceive and notice the plight of others, and thus empathy within this regard can be considered as being an objective, detached or analytical process (Regehr et al., 2002). From the cognitive aspect, nurses behave in a manner that makes the concern and care that the nurses have for their patients apparent to them. Synonymously this parallels the nature of empathic nurses, when they are able to accurately identify the patient's problem, and therefore are able to help patients in controlling their pain (Figley, 1995). Similarly Webster (2010) confirms this, by stating that nurses with greater levels of empathy use verbal and non-verbal communication to convey their understanding, whereas nurses with low levels of empathy are unable to interpret what their client is feeling, and may ultimately disregard the client's feelings.

The second component of empathy is seen to be "a vicarious emotional process in which the person develops an affective connection with another and subsequently has an emotional response to the other's suffering" (Regehr et al., 2002, p. 506). From an emotional aspect, the nurses show unconditional positive regard and respect for their patients, and are therefore emotionally connected, as they have an emotional response to their patient's trauma and suffering (Regehr et al., 2002). This further shows how nurses, through their empathic concern, act unselfishly to be able to provide their patients with the best quality of care.

2.4.2 Conceptualisations of empathy

Although a great deal of interest was vested in studying empathy in previous years, many researchers had issues with the conceptualisation of empathy. Through their research Kunyk and Olson (2001) had found that the concept of empathy had developed more depth and breadth over the years, especially in the nursing profession. From this, the five conceptualisations of empathy that follow, emerged.

2.4.2.1 Empathy as a human trait

Empathy, in this regard, is considered an innate, natural, instinctive and emotional ability (Kunyk & Olson, 2001). Alligood (1992, as cited in Kunyk & Olson, 2001) similarly states that empathy can be seen as a universal human capacity and attribute. It displays the raw, natural feelings that people have for others, and is suggested to be an involuntary action that cannot be taught. This inability for the concept to be learned supports its conceptualisation as a trait (Brunero et al., 2010). Thus, this is the most natural display of care and concerns that nurses, both palliative-care and general-care nurses, can show to their patients.

2.4.2.2 Empathy as a professional state

Empathy as a professional state is “envisioned as a learned communication skill comprised primarily of cognitive and behavioural components that are used to convey understanding of the clients' reality back to her/him” (Kunyk & Olson, 2001, p. 321). Thus the empathy that nurses display unto their patients is learnt, and they use cognitive and behavioural initiatives to express understandings of their patient's conditions and reality to them (Brunero et al., 2010). The definitions of empathy as a human trait and as a professional state are almost similar, the only thing differentiating them is the belief that empathy as a professional state is learned. Although, they do have similar definitions. Alligood (1992, as cited in Kunyk & Olson, 2001) maintains that

they are both unique and distinct. The learned empathy is believed to be developed through cognitive development and personal growth (Kunyk & Olson, 2001).

This gives nurses the ability to make the appropriate professional decisions and choose adequate responsive choices when dealing with their patients. It further allows nurses to be objective, and hence unsuitable personal involvement and emotional exhaustion rarely take place. Eventually, this leads to the nurses putting the needs of the patients first, thus keeping their care patient-focused, rather than making it subjective (Kunyk & Olson, 2001). This is essentially important in palliative care, as it needs to be more patient-centred (Faull et al., 1998; Simoens et al., 2010). The same holds true in general-care nursing.

Morse et al (1992b) (as cited in Kunyk & Olson, 2001) confirm the above, by outlining how this learned empathic response keeps nurses objective and somewhat detached, making them more focused on the therapeutic care of their patients. The main aim here is to look out for the concerns of the patients and understand their suffering. By doing this, the nurses develop a repertoire of cognitive and behavioural communication strategies that improve communication systems between nurse and patient, leading to better patient care (Kunyk & Olson, 2001).

In addition, Brunero et al. (2010) and Kunyk & Olson (2001) suggest that learned empathy could mediate against the effects of exposure to traumatic situations. It is suggested that learned responses keep nurses somewhat detached and objective (Brunero et al., 2010). In terms of this, nurses find their environments predictable and manageable as they have actions and responses ready to be used when a traumatic event presents itself. This is, however, not a good way to respond when nurses are exposed to traumatic material, because the care they offer needs to be authentic and genuine so that service delivery can be of high quality.

2.4.2.3 Empathy as a communication process

The conceptualisation of empathy as a form of communication separates empathy into a three stage process. Firstly, it is a process whereby the nurse perceives the client's emotions and situation, then expresses understanding, and finally the client perceives the understanding of the nurse (Brunero et al., 2010; Kunyk & Olson, 2001). These three stages have been described as empathy potential, empathy expressed and empathy received, respectively.

This conceptualisation of empathy includes both of the previous conceptualisations of empathy, that of empathy as a human trait and professional state. This view does not imply that the response ought to be verbal, but that the communication is a disciplined professional response, requiring an empathic attitude, and the skills necessary to convey this to the client (Kunyk & Olson, 2001). The process results in an accurate perception of the patient, and an understanding of the patient's feelings.

2.4.2.4 Empathy as caring

Empathy here is conceptualised as an understanding that the nurse has of his or her patient's situation and thus the resulting urge to act because of the experience of the patient (Kunyk & Olson, 2001). In this conceptualisation, understanding the patient is not considered to be an outcome of the empathic process, but the outcome is rather considered as the nursing interventions that meet the physical needs of the patients, and thereby alleviate their emotional suffering and pain (Brunero et al., 2010; Kunyk & Olson, 2001).

Four key phases are thus identified within this conceptualisation. These are identification, introjection, detachment and response. Identification is the process whereby the nurse loses consciousness of the self, and become embedded in his or her patient's situation and experiences (Deville et al., 2009; Kunyk & Olson, 2001). Introjection is when the nurse becomes emotionally involved in his or her patient's

experiences. Nurses can therefore understand the experience in the same way their patients do (Kunyk & Olson, 2001). Thus, when nurses take action on behalf of their patients, the resulting emotional responsiveness to the patient's suffering is known as introjection (Kunyk & Olson, 2001). Detachment occurs when the nurses are able to release or disconnect themselves emotionally and physically from the patient. This allows them to maintain their boundaries when faced with their patients emotional and traumatic situations. Finally, the response phase encompasses the results of the patients having all their physical needs met, and their emotional suffering reduced (Kunyk & Olson, 2001).

Overall, the goal of empathy as perceived by the patient is effective nursing (Kunyk & Olson, 2001). Empathy is considered to be caring, rather than curing. This aligns with the purpose and goal of palliative-care nurses. These caring actions are the results of the empathic relationship that exists between the nurses and their patients (Deville et al., 2009). The actions oriented with palliative-care nurses and caring are listening, comforting, supporting and talking, whereas actions associated with general-care nurses and curing are considered to be physical observation, treatment and technological maintenance (Kunyk & Olson, 2001). However, empathy and technology together have been identified as being essential for the quality of patient care.

2.4.2.5 Empathy as a special relationship

Conceptualisation of empathy as a special relationship requires a mutual and understanding relationship between the nurse and the patient overtime (Brunero et al., 2010; Kunyk & Olson, 2001). This conceptualisation is in contrast with that of empathy as a state, where a professional distance is alleged. According to Kunyk and Olson (2001), with empathy as a special relationship; competent interventions and responses to the needs of the patients are identified as antecedents to empathy. Whereas with empathy conceptualised as caring; the competent interventions and responses to the patient's needs are identified as outcomes of the empathic process.

Empathy as a special relationship consists of three sequential phases, which resulted from a field study that explored the patient's perspective on the nature and impact of empathic relationships with nurses (Deville et al., 2009; Kunyk & Olson, 2001). These phases are, initiating, building, and sustaining. The outlining of these phases surfaced as friendship emerged between the nurses and their patients. This friendship was described as intense, deep and meaningful (Kunyk & Olson, 2001). This empathic relationship can be very beneficial to a patient's well-being, as nurses are willing to take the time to get to know their patients as individuals. Furthermore, when the patients in return feel the same sentiments, the development of the critical, empathic relationship between the nurse and patient, results.

According to Kunyk and Olson (2001) this empathic relationship that is formed between the nurse and the patient can improve and maintain a patient's physical and emotional well-being. This friendship facilitates the foundation for the nurse and patient to work together to accomplish the patient's goals; it also empowers the patient to keep on believing, to cope with the situation, and strive to make his or her life more meaningful.

The clarification and conceptualisation of empathy into five constructs occur in the various nursing literature published between 1992 and 2000 (Kunyk & Olson, 2001). However, within recent and modern times, new conceptualisations have emerged and the older ones have been remodified.

2.4.3 Other conceptualisations of empathy

Two further types of empathy have been defined. These are trait and state empathy. Trait empathy is defined as "a human development feeling attribute of the person and the environment process", and state empathy is defined as "transient behaviours enacted to convey understanding of another person" (Webster, 2010, p. 88). Differentiating between the two types of empathy amongst palliative-care and general-

care nurses can be beneficial for health management, as they will be able to select appropriate teaching strategies to facilitate caring for patients.

According to Webster (2010), more focus should be placed on trait empathy, as state empathy has been well addressed within the nursing sphere. Researchers on the empathy team at the University of Tennessee found that “the basic trait of human developmental empathy was sustained when the behavioural state was not” (Webster, 2010, p. 88). Thus, from this finding, recommendations were suggested that nursing management focus on building on the nurses’ strengths, rather than teaching them responses to enhance their empathy.

In a study undertaken by MacRitchie and Leibowitz (2010) on exploring empathy and secondary traumatic stress, it was found that a moderate relationship existed between empathy and secondary traumatic stress. This suggests that nurses with higher degrees of empathy are more at risk of experiencing secondary traumatic stress. The same conclusions can be drawn about burnout studies, where in Raiziene and Endriulaitiene’s (2007) study on the relations of empathy, commitment and emotional exhaustion among nurses; it was found that empathy was positively related to emotional exhaustion. Raiziene and Endriulaitiene (2007) proposed that the empathy-emotional exhaustion relationship is stronger in paediatric care than in adult care, because paediatric care requires more intense emotional involvement from the nurses. The current study could thus infer that the relationship may also be stronger in palliative-care nurses than in general-care nurses, owing to the level of emotional connection in palliative care.

2.5 Emotional exhaustion

Burnout is a familiar construct within the nursing profession, as it depicts cases of extreme mental exhaustion (Iacovdes, Fountoulakis, Moysidou & Ierodiakonou, 1997; Maslach, Jackson, and Leiter, 1997). Nurses who experience burnout could be

indifferent towards their work, and are less able to provide quality nursing care in a consistent and caring manner (Benbow, 1998). This however does not mean they do not care. They may still feel concerned about their ability to fully provide the much-needed health care as expected of them (Sangweni, 2006). This situation can be described by the way in which the nursing environment in South Africa is depicted, where health-care workers may begin their careers with enthusiasm and energy, but may begin to suffer from depression, fatigue and detachment over time.

Emotional exhaustion is experienced when an individual becomes exhausted of his or her emotional resources as well as his or her energy resources (Schaufeli & Peeters, 2000). According to Maslach and Goldberg, (1998), emotional exhaustion is a sign of fatigue that is experienced by workers owing to work overload and possibly some form of conflict. Although true, the current study will be investigating the experiences of emotional exhaustion in palliative nurses owing to their emotional attachment to their patients and to the strain of the job. Thus it can be stated that these nurses experience burnout as a result of their long-term involvement with people in situations that are emotionally demanding (Benbow, 1998; Van den Berg et al., 2006). Emotional exhaustion impairs personal effectiveness and work performance, and it may be brought about by the routine work that palliative nurses do that may result in low task meaningfulness (Schaufeli & Peeters, 2000). Nurses may experience cases of relapse or seeing the same patients time and again without any signs of patient recovery or behavioural change (Demeari, Bakker, Nachreiner and Schaufeli, 2000; Maslach & Goldberg, 1998).

2.5.1 Consequences of emotional exhaustion

Emotional exhaustion can have extremely harmful consequences for employees and organisations alike. These may include physiological problems, family difficulties and a general breakdown in feelings of community. Exhausted workers tend to have poorer work attitudes, lower levels of job performance, and are more likely to seek employment

elsewhere (Schaufeli & Peeters, 2000). For these reasons, emotional exhaustion should be a concern for employees and health-care managers. A better understanding of this construct and its relationship with organisational outcomes could improve the quality of workers' lives, and might also build more productive organisations.

According to Maslach et al. (1997) emotional exhaustion is often associated with a decline in physical, psychological and emotional well-being. It can thus be noted that emotional exhaustion, as a subscale of burnout; not only results in personal costs to the nurses, but also directly impacts on the organisation and the patient (Demeari et al., 2000; Else, 1990; Maslach & Goldberg, 1998).

There are significant costs of emotional exhaustion and burnout to the health-care system. These are characterised into the following four categories: direct costs to the employee, indirect costs to the employee but direct effects on employer, hidden costs to both employee, and employer and potential costs to employer (Else, 1990). The direct costs for nurses include reduced worker productivity, medical costs for illnesses and costs for interventions regarding prevention and treatment (Else, 1990). Cost for replacing or substituting a nurse, sick leave and early retirement payments are some of the examples of the indirect costs to nurses, but they have direct effects on the employing health organisation (Else, 1990). Hidden costs to nurses and their employing organisation entail a decrease in recipients, early retirement payments and potential costs to the health organisation, as well as industrial accidents, increased legal costs and possible liability suits (Else, 1990).

Although the costs of burnout are well documented, very little has been published on the effects of burnout among South African nurses and the health-care system. Therefore South African health-care organisations now have a vested interest in trying to reduce burnout levels among their nursing staff. In particular, they are striving to reduce emotional exhaustion in cases where nurses offer palliative care. Since

palliative-care and general-care nurses work under different conditions, the managing bodies of health organisations have to identify the stressors that are unique to each, in order to determine which strategies should be implemented. It is suggested that altering management styles, professional development programmes and setting up support groups could be some of the strategies that could be implemented to reduce burnout levels among nurses (Demeari et al., 2000; Maslach & Goldberg, 1998).

2.5.2 Emotional exhaustion and compassion fatigue

Geldenhuis (2006) states that emotional exhaustion and secondary traumatic stress may occur simultaneously within one individual, and that compassion fatigue may emerge suddenly, but may have a faster recovery rate than that of emotional fatigue. Alternative ways need to be found to recognise and address the needs of nurses who are facing emotional exhaustion or secondary traumatic stress (compassion fatigue), as they are both a threat to their own health and a potential risk to the patients and organisations they serve (Douglas, 2010).

It should never be forgotten that what nurses do and think, and how they behave may have a major impact on the work they are doing. It is a known fact that can intuitively be felt, that it is not good when nurses are out of balance, emotionally exhausted or have lost their capacity for compassion. So the following questions need to be asked:

- How often does this occur?
- How well is it recognised?
- How can action be taken to help the nurse get back into balance? (Douglas, 2010)

These are the kind of questions that can hopefully make management and decision-makers aware, and help them to “better understand things like individual or team emotional exhaustion, apathy, loss of compassion and capacity for caring” (Douglas, 2010, p. 415).

Knowing the warning signs and symptoms of emotional exhaustion and secondary traumatic stress can alert health management when it's staff is emotionally exhausted or showing signs of compassion fatigue. Management can get a clear picture of the impact that is associated with nurses who are not emotionally present, and who have a lack of compassion. Douglas remarks (2010) "the idea of emotional presence, the capacity for caring, and a reasonable level of compassion an individual has is an intrinsic part of the formula for effective care delivery" (p. 417). Thus, the more that can be done to support nurses and their emotional needs, the sooner the negative impact of emotional imbalances can be minimised for patients, health organisations, and the nurses themselves.

It was mentioned that if nurses allow time for themselves to reflect on their own feelings or pay attention to their own needs, they end up giving more of themselves and taking less care of themselves (Douglas, 2010). This can ultimately lead to emotional depletion that may manifest into absenteeism, illness, decreased productivity and even in staff turnover. So, health management first need to acknowledge the problem, they then need to go about putting structures into place that support the self-care of nurses, and they need to recognise that nurses often face situations that result in the need for time to process feelings. They also need to install all necessary mechanisms that will allow that to happen (Douglas, 2010).

According to Douglas (2010), Kim Richards, founder of the Self-Care Academy created a programme that was designed specifically to address the problem of nurses being emotionally burnt out by educating them on the power of self-care. Richards suggested that health organisations recognise the importance of creating space within which nurses can recharge, such as serenity rooms or even gardens (Douglas, 2010). What nurses need may differ to a large extent. The situations a palliative-care nurse faces are very different from those faced by an emergency-room nurse, as they are different from those of nurses providing general care. Thus, it is crucial to pay attention to what nurses

may need, in some cases a nurse may just need to get off the ward floor for five minutes, in other cases the needs may be much greater (Douglas, 2010).

However, Douglas (2010) further states that when emotional or physical emotion is present, a nurse waiting for someone else to take over their caring responsibilities is not the answer, because they have a strong understanding of what wellness is, and thus they need to take responsibility for their own well-being. If they fail to do so, and receive no help from the organisation, they have the potential to negatively influence the care-giving for which they are working so hard and sacrificing so much for. This may ultimately lead to a reduction in their capacity to be caring, and to have compassion for the patients for whom they are responsible (Douglas, 2010). Eventually, this may impact on the decision that a nurse makes on whether to remain within his or her working environment or not.

2.6 Organisational commitment

Organisational commitment includes employee commitment, which is comprised of work commitment, career commitment and organisational commitment (Lok & Crawford, 2001; Muthuveloo & Rose, 2005). It is considered a useful measure of organisation effectiveness (Brown, 2003). This is because it has the potential to predict outcomes such as performance, organisational goals, tenure, absenteeism, intentions to leave, and staff turnover. Thus, it may be inferred that organisational commitment refers to an individual's wish to be involved in the organisation, as this construct is negatively associated with turnover and absenteeism (Milner, Haskell & Thatcher, 2002).

2.6.1 Definition of organisational commitment

Organisational commitment has been defined in numerous ways. It was first described as an employee's attitude and behaviour towards the organisation, and the willingness to remain part of the organisation (Yew, 2008). From this definition, the following three factors were later outlined to embody the clear definition of organisation commitment:

1. "A strong belief in, and acceptance of, the organization's goals and values"
2. "A willingness to exert considerable effort on behalf of the organization",
3. "A strong desire to remain in the organization" (Yew, 2008, p. 31).

According to Muthueloo and Rose (2005) organisational commitment is defined as "employees' acceptance, involvement and dedication (AID) towards achieving the organisation's goals" (p. 1078). Thus, it is the willingness to accept and work towards the organisation's values and goals, to participate in all work-related and non-work-related activities, and to dedicate time and effort to enhance the organisation's effectiveness and efficiency.

There are two dominant conceptualisations of organisational commitment in sociological literature. These are an employee's loyalty towards the organisation, and an employee's intention to remain with the organisation. Thus according to Muthueloo and Rose (2005), loyalty is "an affective response to, and identification with, an organisation, based on a sense of duty and responsibility" (p. 1079).

With reference to Muthueloo & Rose, 2005), organisational commitment can also be described as "the degree to which an employee identifies with the goals and values of the organisation and is willing to exert effort to help it succeed" (p. 1079). Stemming from this definition, loyalty is thus argued to be an important intervening variable between the structural conditions and values of work, expectations of the nurses, and their decision to stay or leave (Muthueloo & Rose, 2005). It was further stated that positive and reward features of work are expected to increase loyalty, and ultimately have the likelihood of decreasing turnover or intentions to leave (Johnson & Chang,

2006; Muthuveloo & Rose, 2005; Viljoen & Rothmann, 2009). As with loyalty, intent to remain stabilises with tenure, and helps explain the negative tenure and turnover relationship (Muthuveloo & Rose, 2005).

Thus overall, the current study sees organisational commitment as the degree to which an individual identifies with his or her organisation and its goals. This reflects the strength of the linkage between the employee and the organisation, and how they both can have shared goals that will allow the employee to remain employed in that particular organisation. Through this identification nurses would remain within their respective fields because they want to.

2.6.2 Multidimensional nature of organisational commitment

With the multidimensional nature of organisational commitment, three constituents were identified, namely, affective, continuance and normative commitments (Johns & Saks, 2005; Meyer & Allen, 1991; Yew, 2008).

2.6.2.1 Affective commitment

Affective commitment is based on the individual's identification and involvement in the organisation (Johns & Saks, 2005; Johnson & Chang, 2006; Lok & Crawford, 2001; Viljoen & Rothmann, 2009). In other words, it refers to a nurse's "emotional attachment to, identification with, and involvement in, the organisation" (Muthuveloo & Rose, 2005, p. 1080). Here the nurses have an emotional and psychological attachment to the organisation, and they stay in the organisation because of their own personal choice. This attachment is based on positive feelings or emotions to the organisation. Affective commitment is the most prevalent theme to emerge from the organisational commitment model (Meyer & Allen, 1991). Individuals with higher levels of affective commitment remain with the organisation because they want to.

The antecedents of affective commitment include perceived job characteristics, organisational dependability, and perceived participatory management. Job characteristics include task autonomy, task significance, task identity, skill variety and supervisory feedback (Muthueloo & Rose, 2005; Viljoen & Rothmann, 2009). Organisation dependability refers to "... the extent to which employees feel the organisation can be counted on to look after their interests" and participatory management refers to "the extent to which employees feel they can influence decisions on the work environment and other issues of concern to them" (Muthueloo & Rose, 2005, p. 1080). The use of these antecedents creates rewarding situations that are intrinsically conducive to the development of affective commitment. Nurses with low levels of affective commitment may choose to leave their organisation, while employees with a high affective commitment level may want to stay for longer, because they believe in the organisation and its mission (Johnson & Chang, 2006; Muthueloo & Rose, 2005).

2.6.2.2 Continuanace commitment

Continuanace commitment revolves around the cost that would be incurred if an individual were to leave the organisation (Johns & Saks, 2005; Johnson & Chang, 2006; Lok & Crawford, 2001; Muthueloo & Rose, 2005). Nurses first analyse their situation and determine whether leaving their place of employment will be costly. People with high continuanace commitment thus stay in their respective organisations because they have to, as the alternative would be financially strenuous on them.

Potential antecedents of continuanace commitment include age, tenure, career satisfaction and intent to leave (Muthueloo & Rose, 2005; Viljoen & Rothmann, 2009). Age can function as a predictor of continuanace commitment because of its role of investment in the organisation, and it is negatively related to the number of available alternative job opportunities. With reference to Muthueloo and Rose (2005), tenure is indicative of non-transferable investments, such as "close working relationships with co-

workers, retirement and career investments, and skills unique to the particular organisation” (p. 1080). However, career satisfaction is said to provide a more direct measure of career-related investments, which could be at risk if the nurse leaves the organisation (Muthuveloo & Rose, 2005; Viljoen & Rothmann, 2009).

2.6.2.3 Normative commitment

Normative commitment is based on the employees’ feelings of obligation to the organisation (Lok & Crawford, 2001; Yew, 2008). This could be based on the nurses having internalised the values and goals of the organisation. Employees who are high in normative commitment choose to stay with the organisation because they feel they should.

According to Brown (2003), although affective, continuance and normative commitment have been used by Meyer and Allen (1991) to capture the multidimensional nature of organisational commitment, affective commitment is considered a more effective measurement of organisational commitment. The importance of affective commitment was supported by Meyer and Allen (1997) when they explained how employees with a strong affective commitment would be motivated to higher levels of performance and make more meaningful contributions than employees who expressed the other remaining dimensions of organisational commitment. Thus, one could expect that palliative-care nurses would show a higher level of affective commitment than continuance commitment, and that the level would be higher than that of general-care nurses.

A study done by Cohen (1996, as cited in Brown, 2003) where 238 nurses were used as a sample, determined the relationship between affective, continuance and normative commitment and other types of commitment, namely, that of work involvement and career commitment. It was found that affective commitment was highly correlated with

all the other types of commitment (Brown, 2003). This implied that nurses, who remained in the organisation because they wanted to, were more likely to exhibit higher levels of commitment to their work, their jobs and their careers (Brown, 2003; Viljoen & Rothmann, 2009). In referring to palliative-care nurses, because of the emotional attachment they may have to their work environment, their levels of affective commitment which are perceived to be higher than general-care nurses, may continue to manifest into greater levels of work, job and career commitment.

It was established that there was a relationship between an individual's work and non-work domains (Milner et al., 2002). It was further found that organisational commitment had an effect on an individual's personal and private (non-work) life. If a nurse decided to leave his or her organisation or change professions due to a personal decision, it was likely to have a spill-over effect on that individual's work life, where his or her organisational commitment was affected (Milner et al., 2002; Viljoen & Rothmann, 2009). The role that palliative-care nurses undertake within their profession is highly taxing, and a personal decision to leave the organisation may make it easier to transfer the main objective of the decision to a work-related reason.

According to Bergh et al. (2004), organisational commitment does not only concern the employee's identification with the organisation, but also the commitment that the organisation displays to its employees. Taking this, as well as the dimensions of organisational commitments into consideration, it could be inferred that investigating the relevance of organisational commitment in palliative-care nurses would be beneficial to both the employer and its nursing staff.

The present study only concentrated on two dimensions of organisational commitment, that is, affective and continuance commitment. The researcher hypothesised that palliative nurses would most probably want to leave the organisation, because of the stressful nature that surrounds their work. But when nurses take into account the

financial implications of their intent to leave, they may have second thoughts. Their continuance commitment could be high, as they may perceive that good alternative employment would be hard to find (Johns & Saks, 2005; Viljoen & Rothmann, 2009). In addition to the low perceived alternatives, Viljoen and Rothmann (2009) outline that nurses may also have high continuance commitment levels when they take the high personal sacrifice that is associated with leaving into account. However, in terms of affective commitment, palliative nurses may be inclined to remain in their organisation, owing to the emotional attachment they may have to the roles they play. Continuance commitment has been said to increase with the time a person is employed by the organisation (Johns & Saks, 2005; Lok & Crawford, 2001; Viljoen & Rothmann, 2009).

2.6.3 Age and organisational commitment

Age has been shown to have a positive relationship with organisational commitment (Lok & Crawford, 2001; Muthuveloo & Rose, 2005). This may be due to the logic that as workers grow older, alternative employment opportunities become limited, making their current jobs more attractive (Yew, 2008). In reflection of palliative nurses, the same may hold true. The nursing profession has been associated with negative organisational outcomes that influence nurses to want to leave the profession. To reduce staff turnover and intent to leave, management can find ways of strengthening employee commitment to the organisation. However, the age of the nurses and their tenure in the organisation could impact on their wish to leave. Older nurses, or those who have been in the organisation longer, tend to remain committed to their organisation, as it may be hard to find alternative employment elsewhere, and because of the attachment they have to the organisation. Lok and Crawford (2001), however, suggest that older nurses are more satisfied with their jobs, they are likely to receive better positions, and they have cognitively justified the reasons why they remain in their working environment. Thus it would be of interest to establish if there is any difference in older and younger nurses and their perceptions of organisational commitment in the premise of the two nursing conditions, that is, palliative care and general health care.

2.7 Sense of coherence

Coping resources and social support have the power to mitigate negative health effects. However, these coping resources are compromised when traumatic situations arise. The sense of coherence construct looks at the manner in which the nurse's perception of self and the world becomes compromised when working in palliative-care units. According to Gallagher, Wagenfeld, Baro & Haepers (1994), a nurse's cognition is disrupted by working with traumatised patients and his or her sense of coherence is thus likely to be compromised. Antonovsky (1987) argued that the reason for this could be because nurses perceive stressful situations as threatening and anxiety provoking, and this could result in a low sense of coherence.

According to Antonovsky (1987), this concept first developed in terms of a medical model, where it was considered how stressors impacted on one's health. However, this concept has changed in its thinking and has now been broadened to think about the origins of the disease and what influences individuals towards health, (Eriksson, Lindstrom & Lilja, 2007; Gallagher et al., 1994; Hlengani, 2006). The concept now includes an individual's general well-being and overall functioning, as well as perspectives on how factors can influence one's health despite the presence of stressors (Eriksson et al. 2007; Feldt, 1997; Hlengani, 2006).

Antonovsky defined sense of coherence as follows:

“A global orientation that expresses the extent to which one has a pervasive, though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement” (Antonovsky, 1987, p.19).

2.7.1 Coherence

Coherence is defined as “a pervasive, enduring, and dynamic feeling of confidence that one’s internal and external environments are predictable, and that there is a high probability that things will work out as well as can reasonably be expected” (Antonovsky, 1979, p. 123). It is also known as a construct that brings together behaviours which maintain unity for groups and individuals. With reference to Gallagher et al. (1994) and Ponte, Hanley, Kruger, Conlin and DeMarco, (2004), for nurses within the care-giving environment, this translates to a sense that they know their jobs, their managers and themselves. They agree on what their job description is, and the manager makes sure that the nurse has all the necessary tools that are needed for the job. Thus developing a sense of coherence depends on “the existence of mutual trust, a commitment to the process of working together, and a shared responsibility for practice and professional development (Ponte et al., 2004, p. 174). This will be elaborated on later on.

Sense of coherence consists of cognitive and affective components, and it is a generalised, long-lasting way of perceiving one’s life and the world (Antonovsky, 1979; Muller & Rothmann, 2009). Essentially, this shows how individuals think and feel about their world. Antonovsky (1979) states that sense of coherence is shaped, tested, reinforced and modified, not only during childhood but also throughout one’s life, and that it can be easily modified by a rupture in an individual’s structural situation. An individual’s structural situation can refer to his or her place of residence, marital status, occupation and so forth.

With reference to Nene (2005), the strength of an individual’s sense of coherence plays an important part in determining that individual’s choice of remaining in his or her structural situation or altering it. Nurses with a strong sense of coherence levels are able to see reality, and to judge the likelihood of desirable outcomes in the light of unfavourable circumstances (Antonovsky, 1979), whereas, nurses with a much weaker

sense of coherence levels may anticipate that things are likely to go wrong, where they may feel that their needs have not been met owing to a disturbance in their understanding that the world is predictable (Gallagher et al., 1994; Nene, 2005; Ponte et al., 2004). According to McSherry and Holm (1994) sense of coherence assists in assessing an individual's resiliency to stress, and that is why sense of coherence is related to the way in which an individual assesses stressful situations and copes with them.

2.7.2 The dimensions of sense of coherence

Antonovsky (1979) further defined sense of coherence as an individual's ability to consider which coping strategy is the best intervention in addressing any specific problem (Nene, 2005). This strategy is dependent on three components, namely comprehensibility, manageability and meaningfulness, which are the three dimensions of sense of coherence (Antonovsky, 1987; Antonovsky, 1979; Gallagher et al., 1994; Muller & Rothmann, 2009). Nurses are constantly presented with stimuli from both their internal and external environments that require attention. These stimuli either take the form of workplace pressures, demands, indirect trauma, needs expressed by the patients and the family members, and emotional situations that require a nurse's attention. Some individuals are able to appraise these stimuli as consistent, structured, and explicable (Antonovsky, 1987; Hlengani, 2006). This represents the comprehensibility dimension of sense of coherence which perceives the stimuli as making cognitive sense, and information is ordered, predictable and sensible (Antonovsky, 1979; Muller & Rothmann, 2009).

Secondly, an individual's belief that he or she has adequate resources to meet the demands of the environment ties into the second dimension of sense of coherence referred to as manageability (Antonovsky, 1979). Nurses have the perception that resources are at their disposal, and will be sufficient to adequately meet the demands and pressures from the environmental stimuli (Muller & Rothmann, 2009). Resources

can either be the necessary skills, knowledge and materials one has, or the support offered by formal and informal social structures (Antonovsky, 1987).

Lastly, meaningfulness refers to the degree to which the person perceives and feels that life is making emotional sense (Feldt, 1997; Muller & Rothmann, 2009). The demands need to be seen as challenges that are worthy of commitment and emotional investment (Antonovsky, 1987). According to Nene (2005), this may happen to an extent that life makes sense emotionally and that any demands or problems that arise in the nurses' lives are worthy to be committed and invested in, rather than being referred to as a threat. Meaningfulness is the most central component of sense of coherence because of its motivational element (Antonovsky, 1987).

2.7.3 The development of sense of coherence

Life experiences are vital in shaping one's sense of coherence. From birth, every individual goes through circumstances of challenge and response, stress, tension and resolution (Antonovsky, 1979). Similarly Feldt (1997) states that the core of one's sense of coherence is established in early development, but is subsequently modified during the course of one's life. The first years of employment are an important transition period in this. It is through this consistent experience and progression that the world becomes more coherent and predictable. When nurses' experiences become predictable, unpredictable experiences will be unpleasant for them, and they will not be able to deal well with them (Muller & Rothmann, 2009; Nene, 2005). This inevitably weakens that individual's sense of coherence. However, the ironic thing is that those unpredictable experiences are essential and key to the development of a strong sense of coherence (Nene, 2005). It is through this process that an individual learns and acquires defence mechanisms to deal with the unexpected, and be able to cope with it.

Sense of coherence was estimated to be fully developed by the time an individual reached the age of 30. This was hypothesised because it was believed that at this developmental stage, an individual had more coherent ways of looking at the world (Antonovsky, 1997). Similarly Feldt (1997) outlined how after the third decade or so of life, sense of coherence remained rather stable, although minor or slow changes might occur. It was further proposed that particular social structures and cultural and historical situations were likely to provide the developmental and reinforcing experiences that would result in a strong sense of coherence (Nene, 2005). This is better emphasised by the study that was conducted by Antonovsky and Sagy (1986), where it was found that the development of a sense of coherence was dependent on a person's relationship with his or her parents and the stability of the community in which they had grown up. Therefore, a stable community enables nurses to perceive their world as predictable and manageable.

In this study, palliative nurses work in traumatic stress-related environments, and thus it could be anticipated that the nurses may have a lowered sense of coherence levels. Secondary trauma may change an individual's cognitive schemata and interpersonal relations (Bride et al., 2003; Dutton & Rubinstein, 1995). When nurses experience secondary traumatic stress; their tolerance levels and maintaining an inner sense of connection with others is compromised (Hlengani, 2006; Janoff-Bullman, 1985; Nene, 2005). Traumatic experiences may change the psychological needs of an individual. These needs are safety, trust, self-esteem, control and intimacy. If the change takes place, it will impact on the individual's relationships, identity and feelings, such as hope or despair.

Sense of coherence is a global buffer, unlike context-specific or situation-specific concepts such as supervisor support (Hlengani, 2006). In addition to acting like a buffer for traumatic incidents, a sense of coherence also allows individuals to utilise resources in their environments to alleviate negative consequences. Thus a sense of coherence is seen as a health resource rather than a particular coping style. According to Feldt

(1997), individuals with a strong sense of coherence show great flexibility in the types of resources and coping styles they use. The stronger the sense of coherence, the greater the well-being, as a sense of coherence has been associated with competence, general well-being, life satisfaction, functional status and psychological and physical health (Feldt, 1997). In the same vein, a strong sense of coherence is negatively associated with depression, perceived work stress, anxiety and psychological and physical distress (Feldt, 1997; Nene, 2005). Thus, nurses with a high sense of coherence levels are likely to perceive stressors as predictable and explicable, and have confidence in their capacity to overcome stressors.

As mentioned above, developing a sense of coherence depends on mutual trust, commitment to working together, and a shared responsibility for practice and professional development (Ponte et al., 2004). However, a number of factors have been identified that can interfere with the development of coherence in nurses. According to Ponte et al. (2004) economical constraints may appear to displace the needs of nursing staff and the patients to whom they provide care. This may lead nurses to believe that the needs of patients, families and staff are less important than the financial goals of the health organisation. Consequently coherence in such an environment may suffer, and as a result staff burnout and high turnover may emerge. Individual characteristics were identified as another factor in developing a sense of coherence. Personal attributes such as hardiness, those elements of personality that determine how one copes with stress and anxiety, and work excitement, or one's commitment to their work as well as one's enthusiasm towards it, have been outlined as the elements that affect coherence (Ponte et al., 2004).

Ponte et al. (2004) also mention how positive affectivity and self-advocacy are attributes that may help a person to develop a sense of coherence. They carry on to mention how, without a sense of coherence, nurses may begin to feel isolated and misunderstood by their organisation, and hence communication between management and nursing staff may be compromised, causing the relationship to depreciate (Ponte et al., 2004).

2.7.4 Sense of coherence and stress

As previously mentioned, a sense of coherence is related to the way in which an individual assesses and copes with stressful situations (McSherry & Holm, 1994). Similarly Antonovsky (1979) states that the strength of a sense of coherence has direct physiological consequences that may affect the health status of an individual. Just to reiterate, an individual with a strong sense of coherence will be able to mobilise resources to confront a stressor, because he or she has a perception that the environment is predictable and comprehensible (Antonovsky, 1979), whereas a person with a low sense of coherence is more likely to give up before taking action when facing a stressful situation. Therefore, a negative correlation exists between a sense of coherence and the psychological or physical responses to stress.

McSherry and Holm (1994) conducted a research study on individuals to assess their psychological and physical responses when experiencing stressful situations or being exposed to them. It was found that individuals with a low sense of coherence reported being more stressed or anxious and angry, while those with a high sense of coherence managed to deal with the challenges of a stressful situation. Thus, in view of these findings it can be assumed that secondary traumatic stress may have a negative correlation with a sense of coherence.

When nurses experience secondary traumatic stress, they are more than likely to have a low sense of coherence and their worldview will be affected by the traumatic work to which they are exposed. According to Pearlman and Saakvinte (1990) traumatic experiences cause ruptures to the self, and the frame of reference that consists of identity, worldview and spirituality is disrupted. Hence, an individual's ability to tolerate affect, maintain a sense of self and inner sense of connection is thus affected (Janoff-Bullman, 1985; Nene, 2005).

The individual's ego resources, as well as his or her sense of memory, may also be impaired. According to McCann and Pearlman (1990) memory disruption is a key aspect of trauma consequences. Nurses working with and listening to the accounts of victimisation, may internalise the memories of their patients, and the memory may be altered temporally or permanently (Nene, 2005).

Janoff-Bullman (1985) further states that traumatic life events have a direct impact on three basic assumptions about the self and the world. More specifically, these assumptions are the belief in personal vulnerability, the view of oneself in a positive light and the belief in a meaningful orderly world (Nene, 2005). A shift in these assumptions has been observed in most nurses who work with traumatised clients. Thus, similar views may be regarded in terms of palliative-care nurses and their work with terminally-ill patients.

A sense of coherence can be modified and transformed due to the presence of a stressor which greatly impacts on a nurse's personal life and environment (Antonovsky, 1979). According to Nene (2005), this unpredictable experience may result in a significant weakening of a nurse's sense of coherence, and may ultimately disrupt the nurse's care-giving capacities. These self-capabilities are attributed to interpersonal abilities that enable the nurse to have a positive sense of self and have affect tolerance (Pearlman & Saakvitne, 1995). According to Nene (2005), this aspect has the following three categories:

- (a) "The maintenance of the positive sense of self"
- (b) "The ability to modulate strong affect"
- (c) "The capacity to have inner sense of forming therapeutic alliance with others" (p. 32).

A nurse may feel isolated or disconnected from his or her surroundings, and may have constant self-criticism and hypersensitivity to emotional situations. Nurses may overindulge in food or drugs just to manage affect, and overextend themselves when their self-capabilities have ruptured (Nene, 2005). In order to adapt, nurses generally

tend to use certain defence mechanisms to conceal their painful experiences and their secondary traumatic stress symptoms.

2.7.5 Sense of coherence and well-being

With reference to Eriksson et al. 2007; Gallagher et al. (1994); and Hart, Hittner and Paras (1991), Antonovsky has proposed this salutogenic model to explain why some people are located at the positive end of the health-illness continuum. This model suggests that wellness is strongest among individuals with a highly-developed sense of coherence. According to Feldt (1997), the model of sense of coherence is widely used in well-being studies. Results tend to be consistent, where the stronger the sense of coherence, the greater the well-being (Eriksson et al. 2007; Feldt, 1997; Hart et al., 1991). A strong sense of coherence is “associated with competence, life satisfaction, general well-being, functional status and psychological and physical health” (Feldt, 1997, p. 135). Therefore drawing from the above; one may assume that a sense of coherence predicts healthier behaviours. Feldt (1997) also states how outcomes such as depression, perceived work stress, anxiety and psychological distress are negatively associated with a sense of coherence. In view of the above, nurses, particularly palliative-care nurses, who have a stronger sense of coherence will facilitate their own wellness and well-being. Due to the emotionally taxing and extenuating circumstances in which these nurses operate throughout their work schedules, having a strong sense of coherence, will aid them in being emotionally comfortable and secure within their work roles, and will thus have a positive impact of the care they provide to their patients.

In today’s health-care environments, management and top nursing officials are challenged to create practice environments that promote multidisciplinary collaboration, professional development and cultures of safety (Ponte et al., 2004). With reference to (Ponte et al., 2004) endorsing a sense of coherence among staff nurses in terms of their place within the nursing department and the department’s place within the broader organisation is essential to the development of such environments. Through this, nurses

are more likely to feel confident that the work they do, and the care and support they provide to their patients and their patients' families are strongly supported by their organisation. This is because they will have an established sense of coherence about their working surroundings and environment. It is thus crucial for any health organisation to foster a sense of coherence among its nursing staff in order to enhance the environment for care, and to minimise nurses' perception of perceiving stressful situations as threatening and anxiety provoking.

2.7.6 Sense of coherence and secondary traumatic stress

Gallagher et al. (1994) suggest three dimensions of coping that had been developed, namely, managing the situation, managing the meaning of the situation, and managing symptoms of distress. In the same vein, Pearlman and Saakvitne (1995) suggest ways of treating compassion fatigue (secondary traumatic stress) and enhancing a sense of coherence. They propose that personal, professional and organisational strategies may assist in enhancing nurses' sense of coherence and reducing their secondary traumatic stress levels.

According to McCann & Pearlman (1992) personal strategies include the nurses' identification of their disruptive schemata which may include salient needs (safety, trust, esteem, intimacy and control). Identifying the disruptive schemata will aid nurses in identifying the main themes within the traumatic experiences they encounter, and through this the traumatic imagery will be less intrusive (McCann & Pearlman, 1992; Nene, 2005). With reference to Thompson (2003, as cited in Nene, 2005) maintaining a fulfilling personal life, where one is able to find a balance between one's work and sufficient rest can also assist in reducing one secondary traumatised. Personal psychotherapy was also recommended as it may enhance a nurse's ability to reclaim his or her emotional lives, thus strengthening the sense of coherence (Nene, 2005; Pearlman & Saakvitne, 1995).

In terms of professional strategies, because traumatic work can be emotionally and physically demanding, it was suggested that regular supervision with an experienced trauma therapy supervisor may aid in reducing secondary traumatic stress and increasing a nurse's sense of coherence (Pearlman & Saakvitne, 1995). This allows communication between nurses and the supervisor where the nurses can off-load and discuss their concerns, where they can gain support and share coping strategies, and where they can affirm their commitment (Pearlman & Saakvitne, 1995; Nene, 2005).

In terms of organisational strategies, when nurses experience psychological, physical or emotional work-related difficulties, this may impact negatively on the organisation. Nurses who fail to acknowledge and deal with secondary traumatic stress may affect the effectiveness and the efficiency of the quality of patient care that is provided. Secondary traumatic stress in health organisations may result in nursing staff becoming ineffective team members, where they become disengaged and non-participative from crucial and beneficial organisational activities that may aid in the well-being and comfort of their patients. Secondary traumatic stress and low levels of a sense of coherence could further lead to staff turnover.

That is why it would be beneficial to nurses to have regular supervision with someone who can help with their traumatic encounters. They should be open and have discussions with other nurses in the field in order to share experiences, and hopefully gain useful information that could benefit them and ultimately benefit their patients. Nene (2005) suggests that skill development should also be encouraged among the nurses, to gain better understanding, and have the resources to cope and function effectively within their professions.

2.8 Rationale and conclusion

With the current and ever-growing shortage of nurses, it is imperative that nurses find ways to prevent burnout and effectively manage compassion and emotional fatigue that can result from working with traumatised populations (Maytum, Heiman & Garwick, 2004). The argument that this study attempted to convey is that what a person does, and what a person sees affects that person emotionally. Emotions are highly regarded within this type of working environment, and they can affect the nurses' quality of patient care. The research study thus investigated the difference between palliative-care nurses and general-care nurses in relation to their emotional well-being. Factors such as secondary traumatic stress, emotional exhaustion, empathy, affective and continuance commitment, and a sense of coherence were used to determine whether there were any differences in emotional well-being amongst palliative-care and general-care nurses. This is to outline that palliative-care nurses and general-care nurses work under different conditions, and thus should be considered as separate entities when management administer support and resource initiatives.

Management and stakeholders within the health-care profession need to attempt to fully understand how the factors in the health-care environment are linked to the patients' outcomes. According to Ponte et al. (2004), research on nurses and nursing care has produced significant empirical evidence to support the notion that the quality of the nursing practice environments makes a difference in patient care. However, now the question would be, how does one go about improving the practice environments? Health organisations may be able to implement strategic ways of improving the emotional well-being of their nurses by contributing to the nurses' sense of coherence and finding ways of increasing emotional resources. Organisational and social support, resource availability and counselling initiatives could be prime examples (Else, 1990; MacRitchie & Leibowitz, 2010, Maytum et al., 2004). Organisations will be able to assess those who are at risk, promote protective factors, treat those who are already suffering from the impact of traumatic stress, and protect clients from enduring further (Gallagher et al., 1994; Harinarain, 2007, Pearlman & Saakvitne, 1995). This will in turn

aid in decreasing the effects of secondary traumatic stress and emotional exhaustion, and thus promote organisational commitment and intentions to remain in the organisation. It may also improve the quality of patient care, and may find ways of making the lives of patients easier. Nurses will be able to manage their own emotional requirements, and still direct their care to preserving hope, easing the struggle and facilitating a peaceful life for their chronically ill patients.

The creation of practice environments where nurses, either palliative or general, can trust that they will be supported by management is therefore the most important priority. According to Ponte et al. (2004), lack of trust results in multidisciplinary collaboration being compromised, the quality of patient care diminishes, and a work environment that is truly patient and family focused ceases to exist. Therefore, it was suggested that to maintain trust between the nursing staff and management, management need to be consistently responsive to the concerns, dilemmas and other issues of the nursing staff (Ponte et al., 2004).

2.9 Aim of the study

The aim of the study was to compare the emotional well-being of nurses who provide palliative care and nurses who provide general care to patients, in Johannesburg. The study sought to investigate whether there could be differences in emotional well-being between nurses who are working in these two respective caring positions.

CHAPTER 3

METHODOLOGY

3.1 Introduction

Considerable work has been done in terms of the psychological consequences of working with traumatised clients. With regard to nurses, the focus has mostly been directed towards the victims of the trauma, and to a lesser degree to the professionals who work with the victims. However, research conducted with palliative-care nurses has mostly been qualitative. Thus, the consequences of working with traumatised patients have rarely been explored in a quantitative manner. This study proposed that palliative-care nurses are vulnerable within their work roles, and therefore they are an important group of health-care professionals who must be investigated, especially in comparison with general-care nurses.

There is a scarcity of research on emotional well-being amongst palliative-care and general-care nurses. Thus, the study sought to address a gap in research, as well as contribute to further theoretical understanding of the differences between palliative-care and general-care nurses, as well as their working environments. The study expected nurses to experience secondary traumatic stress, empathy, emotional exhaustion and a sense of coherence, and have affective and continuance commitment. It is also expected that nurses in palliative care could be more severely affected by the adverse working conditions than nurses who provide general care.

Furthermore, nurses; either palliative or general, who show signs of declining emotional well-being, would not be offering the best quality of care to their patients. This may thus hamper the patients' recovery process, and make the process of dealing and coping with their illness quite difficult. Therefore a lack of empirical research into the emotional

differences of palliative-care and general-care nurses was the driving force behind this study.

This chapter focuses on the research aim, research questions and the hypotheses. Information about the research design, description of the sample, procedure, measuring instruments and statistical techniques used will also be provided.

3.2 Research design

A non-experimental, cross-sectional design was implemented for the study. A non-experimental design is used when the researcher has no control over the variables (Rosenthal & Rosnow, 1991). As in the case of this study, the researcher did not have control over the variables of secondary traumatic stress, emotional exhaustion, empathy, affective and continuance commitment, and sense of coherence. As this research was cross-sectional in nature, all questionnaires were administered at a single point, thus making the study more economical, time efficient and cost efficient (Welman & Kruger, 2001). Using a cross-sectional design thus seemed to be advantageous, as it is believed to be useful in research settings where control of the participants is difficult (Harinarain, 2007). The study had elements of a quantitative design. This research design measured the emotional well-being levels of nurses, in both palliative and general care, by using standardised instruments.

3.3 Research question

Is there a difference in the emotional well-being between nurses who provide palliative care and nurses who provide general health care?

3.4 Hypotheses

Hypothesis 1: There is no difference in secondary traumatic stress between nurses who provide palliative care and nurses who provide general health care

Hypothesis 2: There is no difference in emotional exhaustion between nurses who provide palliative care and nurses who provide general health care

Hypothesis 3: There is no difference in empathy between nurses who provide palliative care and nurses who provide general health care

Hypothesis 4: There is no difference in affective commitment between nurses who provide palliative care and nurses who provide general health care

Hypothesis 5: There is no difference in continuance commitment between nurses who provide palliative care and nurses who provide general health care

Hypothesis 6: There is no difference in a sense of coherence between nurses who provide palliative care and nurses who provide general health care

3.5 Sample

The sample comprised of palliative-care and general-care nurses. There were 32 nurses who were drawn from palliative-care units and 35 nurses who were recruited from hospital units that provided general care. Thus, the total number of participants for this study was 67 nurses. Based on the nurses' availability and willingness to respond, a non-probability sampling technique was employed by the researcher. The palliative-care nurses were sourced from a referral hospital in the Johannesburg region. Nurses were

drawn from the palliative-care unit and from the oncology units of the Charlotte Maxeke Johannesburg Hospital. The nature of terminal illnesses that the palliative-care nurses attended to were referrals from the oncology and chronic illness wards. The patients had illnesses ranging from cancer through to renal failure. A snowballing sampling technique was used to obtain the general-care nursing sample, which was also obtained from the Charlotte Maxeke Johannesburg Hospital. Both groups, palliative-care and general-care nurses, consisted of males and females who worked as full-time nurses.

3.6 Measuring instruments

The following instruments were used in this study: the Secondary Traumatic Stress Scale, the Maslach Burnout Inventory (Emotional Exhaustion), the Interpersonal Reactivity Index, the Affective and Continuance Commitment Scales, and the Orientation to Life Questionnaire.

3.6.1 Biographical Questionnaire (See Appendix D)

A biographical questionnaire that was developed for the purpose of this study was used to obtain demographic information from the research sample. Participants were asked to give information regarding their gender, age, tenure, marital status, number of hours worked per week and number of children.

3.6.2 Secondary Traumatic Stress Scale (See Appendix E)

The Secondary Traumatic Stress Scale is a self-report instrument, developed to measure secondary traumatic stress in health-care workers (Dominguez-Gomez & Rutledge, 2009). It is a 17-item scale that assesses the frequency of symptoms among 3 subscales. These subscales are intrusion (5 items), avoidance (7 items) and arousal (5 items). A further breakdown sees that intrusion consists of Items 2, 3, 6, 10 and 13,

avoidance (Items 1, 5, 7, 9, 12, 14 and 17) and arousal (Items 4, 8, 11, 15 and 16) respectively. Items 2, 3, 6, 10, 12, 13, 14 and 17 are stressor-specific items, where the traumatic stressor is identified as exposure to clients, and the remaining items (Items 1, 4, 5, 7, 8, 9, 11, 15, 16) are characteristics of the negative effects of traumatic stress (Bride et al., 2003). According to Dominguez-Gomez & Rutledge (2009), these three subscales correspond with criteria in the Diagnostic and Statistical Manual of Mental Disorders that are necessary to diagnose Post Traumatic Stress Disorder.

Participants were instructed to read each item and indicate how frequently the item deemed to be true to them during the previous week (7 days), by using a 5-point Likert Scale. The Likert Scale had responses ranging from 1 (never) to 5 (very often). When the respondent reported that a symptom was experienced “occasionally”, “often”, or “very often”, then it was inferred that the symptom was present (Dominguez-Gomez & Rutledge, 2009).

The potential range of scores that can be obtained on the Secondary Traumatic Stress Scale range from 17 to 85. Because the mean score of the scale is 42.5, a score of 42.5 was proposed as the cut-off score for the scale. This infers that group means above the cut-off score point of 42.5 indicate high levels of secondary traumatic stress, and group means below the cut-off point of 42.5 indicate low levels of secondary traumatic stress.

In a study conducted by Dominguez-Gomez & Rutledge (2009), the Cronbach α coefficient of the STSS instrument was found to be .91, and the subscales had Cronbach α coefficients of .92 for intrusion, .92 for avoidance, and .92 for arousal. These indicated a very good internal consistency. Similarly Bride et al. (2003) had also reported very good internal consistency, with Cronbach α coefficients of .93 (full STSS), .80 (intrusion), .87 (avoidance), and .83 for arousal. Cronbach α coefficient on a South African sample was calculated for this study and the internal consistency of the full scale was found to be .85.

3.6.3 The Interpersonal Reactivity Index (See Appendix F)

The Interpersonal Reactivity Index is a multidimensional scale that consists of 28 self-report items designed to measure both cognitive and emotional components of empathy (Davis, 1980). It does so by measuring the four dimensions of empathy, namely, fantasy, perspective taking, empathic concern and personal distress (Davis, 1980; Webster, 2010). The items were measured on a 5-point Likert Scale with responses ranging from “describes me well” to “does not describe me well”. The subscale scores ranged from 7 to 35, as each subscale had seven items that were scored from 1 through to 5 points (Webster, 2010).

The potential range of scores that could be obtained on the Interpersonal Reactivity Index ranged from 28 to 140. Because the mean score of the scale was 70, a score of 70 was proposed as the cut-off score for the scale. This infers that group means above the cut-off score point of 70 indicate high levels of empathy, and group means below the cut-off point of 70 indicate low levels of empathy.

Factor analysis of the 28 items resulted in the four subscales mentioned above, and became the four dimensions of empathy. Fantasy is the extent to which an individual can imagine himself or herself in the same situations as fictional characters. Higher scores in the fantasy subscale measure suggest a tendency to be helpful to others (Webster, 2010). Perspective-taking refers to an individual's spontaneity to adopt others' points of view. An example of a perspective-taking item on the scale is: “I try to look at everybody's side of a disagreement before I make a decision”. Fantasy and perspective-taking are the cognitive components of the scale.

The emotional component of this scale comprises of empathic concern and personal distress. Empathic concern is the extent to which individuals have feelings of concern and sympathy towards others in distress. An example of an empathic concern item is: “I

often have tender, concerned feelings for people less fortunate than me.” According to Webster (2010), higher scores on the empathic concern subscale show an ability to feel compassion, warmth and concern for others. Finally, personal distress assesses the level of an individual’s feelings of fear and discomfort, as a result of observing another person’s negative experience (Davis, 1980). An example of a personal distress item is: “When I see someone who badly needs help in an emergency I go to pieces”. High scores on the personal distress subscale indicate poor interpersonal functioning (Webster, 2010).

Davis (1980) reported an internal reliability for the Interpersonal Reactivity Index as .71 to .77, and the test-retest reliability was found to be .62 to .71. The scale has been used on a South African sample by Harinarain (2007), and it found that the overall reliability of the IRI was 0.59, when tested on employee assistance programme counsellors. The internal consistencies of the subscales are fantasy (.74), perspective-taking (.66), empathic concern (.62), and personal distress (.48) (Harinarain, 2007).

3.6.4 Emotional exhaustion: Maslach Burnout Inventory (See Appendix G)

The Maslach Burnout Inventory measures emotional exhaustion, depersonalisation and reduced personal accomplishment (Maslach et al., 1997). The instrument consists of 22 items that are divided into subscales: 9 items in the Emotional Exhaustion subscale, 5 items in the Depersonalisation subscale, and 8 items in the Personal Accomplishment subscale. For the purposes of this study, only the Emotional Exhaustion component of the Maslach Burnout Inventory will be used. This subscale consists of Items 1, 2, 3, 6, 8, 13, 14, 16 and 20 (Sangweni, 2007). The subscale consists of items such as: “I feel emotionally drained from my work” and: “Working with people directly puts too much stress on me”. The items are scored on a 7-point Likert Scale, ranging from “never”, to “everyday” (Maslach et al., 1997). The scale has been used on a South African sample (Sangweni, 2007).

The potential range of scores that can be obtained on the Maslach Burnout Inventory (Emotional Exhaustion) range from 0 to 54. Because the mean score of the scale is 27, a score of 27 is proposed as the cut-off score for the scale. This infers that group means above the cut-off score point of 27 indicate high levels of emotional exhaustion, and group means below the cut-off point of 27 indicate low levels of emotional exhaustion.

The reliability coefficient (Cronbach's alpha) for the Emotional Exhaustion subscale was found to be .90 (Maslach et al., 1997; Sangweni, 2007). This shows that the subscales reflected high internal consistency. The assessment of validity was carried out by correlating the scale scores with the presence of certain job characteristics that were expected to contribute to burnout that was experienced (Maslach et al., 1997).

3.6.5 Organisational Commitment Scale

To measure the two aspects of organisational commitment for this study, that is, affective and continuance commitment, Meyer and Allen's Organisational Commitment Scale was used. The Affective Commitment Scale (ACS) and the Continuance Commitment scale (CCS) were specifically used.

3.6.5.1 Affective Commitment Scale (See Appendix H)

Affective commitment is referred to as the emotional attachment, involvement and identification that an individual has to his or her organisation. It was measured with an eight-item scale. The scale was a five-point Likert Scale, with responses ranging from "strongly disagree" (1) to "strongly agree" (5). Sample items included: "I enjoy discussing my organisation with people outside it" and: "This organisation has a great deal of personal meaning for me." Four of the items were negatively phrased and were reverse-coded for analysis. The Cronbach (1951) alpha internal reliability coefficient was .87 (Allen & Meyer, 1990). In a South African sample, an alpha coefficient of .84 was yielded (Singer, 2002).

3.6.5.2 Continuanace Commitment Scale (See Appendix I)

The Continuanace Commitment Scale was used to measure the continuance aspect of organisational commitment. The scale consisted of 8 items measured on a five-point Likert Scale. The responses ranged from “strongly disagree” (1) to “strongly agree” (5). It consisted of items like: “It would not be too costly for me to leave my organisation now” and: “One of the major reasons I would continue to work is that another organisation may not match the overall benefits I would have here”. Two items were negatively phrased and were reverse coded. The Cronbach alpha was reported to be .75 and was therefore sufficiently reliable (Allen & Meyer, 1990). Singer (2002), found an alpha coefficient of .79 on a South African sample.

The potential range of scores that can be obtained on the Affective Commitment Scale, as well as on the Continuanace Commitment Scale, differs from 8 to 40. Because the mean score of each of the scales was 20, a score of 20 was proposed as the cut-off score for the scales respectively. This infers that group means above the cut-off score point of 20 indicate high levels of affective commitment and continuance commitment, and group means below the cut-off point of 20 indicate low levels of both affective and continuance commitment.

3.6.6 Orientation to Life Questionnaire (See Appendix J)

The Orientation to Life Questionnaire was used to measure sense of coherence and its three interrelated components of meaningfulness, comprehensibility and manageability (Antonovsky, 1987; Feldt & Rasku, 1998). Two types of Antonovsky’s Orientation to Life Questionnaire can be found, namely the 29-item scale and the shortened 13-item scale. For the purpose of this study, the 13-item scale was used, where participants indicated their agreement with items about life attitudes. It consisted of Items 4, 5, 6, 8, 9, 12, 16, 19, 21, 25, 26, 28 and 29 from the 29-item scale (Antonovsky, 1987).

Items 4, 8, 16 and 28 measure meaningfulness. An example of an item from this subscale is: “Do you have feelings that you don’t really care about what goes on around you?” Items 5, 12, 19, 21 and 26 measure comprehensibility, and an example of an item is: “Do you have very mixed-up feelings and ideas?” The remainder of the items (6, 9, 25 and 29) measure manageability. An example of such an item would be: “How often do you have feelings that you are not sure you can keep under control?” The scale has a 7-point Likert Scale, ranging from “very seldom” to “very often”, for other items it ranges from “never happened” to “always happened”, “no clear goals or purpose at all” to “very clear goals and purpose” (Hlengani, 2006; Feldt & Rasku, 1998). Five of the items were reversed, so that a high score of the total scale indicated a strong sense of coherence (Feldt & Rasku, 1998).

The potential range of scores that can be obtained on the Orientation to Life Questionnaire, range from 13 to 91. Because the mean score of the scale was 45.5, a score of 45.5 was proposed as the cut-off score for the scale. This infers that group means above the cut-off score point of 45.5 indicate high levels of sense of coherence, and group means below the cut-off point of 45.5 indicate low levels of sense of coherence.

According to Hlengani (2006), the 13-item Orientation to Life Questionnaire has demonstrated satisfactory reliability and validity levels. The scale has been used in South Africa, and Hlengani (2006) reported that the internal consistency was .70.

3.7 Procedure

Purposive and snowball sampling were used to recruit participants for the study. Purposive sampling involves the researcher’s choice of a sample that is based on participants who the researcher thinks would fit his or her sample criteria (Whitley, 2002). Snowball sampling is affected when the researcher finds a participant, and asks

that participant to refer his or her friends or acquaintances who may be interested in taking part (Whitley, 2002). The snowballing technique was mostly used to access the general-care nursing participants on duty. Palliative-care nurses were recruited via purposive sampling, as the researcher targeted the palliative-care unit and the oncology units of the Charlotte Maxeke Johannesburg Hospital for that purpose.

Ethical clearance was first sought from the University of the Witwatersrand Research Office, and a clearance certificate was issued (see Appendix A). Permission to carry out the study was then sought from the CEO's office of the Charlotte Maxeke Johannesburg Hospital. A clearance certificate was issued (see Appendix B). When permission was granted by the CEO of the hospital, access was sought from the Matron's Office to gain entry to the wards and access relevant information. For the palliative-care sample, the palliative-care ward, adult and children oncology wards, and the HIV/AIDS wards were targeted. Unfortunately, access was not granted for the HIV/AIDS or trauma units as further ethical clearance measures had to be sought. The researcher had no permission to do so. Thus palliative-care nurses were drawn from the palliative unit within the hospital, as well as from the adult and children oncology wards. These palliative-care nurses attend to patients with cancer or any chronic illnesses, such as renal failure, liver failure and even heart failure, among other things.

The general sample consisted of nurses who were working within the same hospital, and were recruited from wards other than those mentioned above. Initially 62 questionnaires were distributed to palliative-care nurses. The response rate was 52%, as only 32 questionnaires were completed and returned. For general-care nurses, 48 questionnaires were handed out, and 35 were returned. This yielded a 73% return rate. All 67 responses were used.

Nurses were briefly told about the study before they were handed the questionnaires, even though all the information was also on the participant information sheet (see Appendix C). The participant information letter assured participants of anonymity, and

that participation was voluntary, and that there would be no negative repercussions if they opted to withdraw. The questionnaires were sent out in envelopes. The questionnaires could be sealed and enclosed, so that the participants' responses would not be seen by others. Questionnaires were collected from the "nurse in charge" of the specific wards. The completed questionnaires were also collected through a central person in the snowballing technique.

3.8 Statistical analyses

The statistical procedures that were used for analysing the data are briefly outlined below:

3.8.1 Internal reliability (*Cronbach's alpha*):

Cronbach's alpha coefficients were calculated for Secondary Traumatic Stress Scale, Maslach Burnout Inventory, The Interpersonal Reactivity Index, Affective and Continuance Commitment Scale and the Orientation to Life Questionnaire to determine the internal consistency and reliability of the scales. Some of the scales had subscales. These were the Secondary Traumatic Stress Scale, the Interpersonal Reactivity Index, and the Orientation to Life Questionnaire. The internal consistencies for those subscales were also calculated. The internal consistency reliabilities provided the researcher with an indication whether the variables that were employed in the study were measured accurately (Rosenthal & Rosnow, 1991). The reliabilities of the scales are reported in the results section.

3.8.2 Descriptive statistics

Descriptive statistics were used by calculating the means, standard deviations, frequencies, percentages and minimum and maximum scores on significant variables. This type of analysis is useful in providing a description of various characteristics of the data gathered.

3.8.3 Analysis of variance (ANOVA)

ANOVA is a statistical procedure for testing differences in the means of several groups (Howell, 1995). It provides a method for measuring the differences in the dependent variables by observing two or more groups formed by the independent variable. Thus an ANOVA was conducted to investigate the differences between palliative-care and general-care nurses. It was also utilised for secondary analysis when the variables of age and tenure were incorporated into the analysis. The ANOVA was chosen in preference to the *t*-Test analysis, because the ANOVA analysis has the power to control for errors as compared to the *t*-Test analysis, and it is the recommended test when planning to do multiple comparison analyses, rather than doing a series of *t*-Tests.

3.9 Ethical considerations

The research study was conducted after obtaining ethical clearance from the University of the Witwatersrand's Human Research Ethics Committee (medical), as the study was dealing with health-care personnel (Appendix A). The permission to conduct the study and to have access to the palliative-care and general-care nursing participants was sought from the CEO's office of the Charlotte Maxeke Johannesburg Hospital and from the Matron's Office (Annexure B).

The researcher stated the purpose of the study to the participants, and gave information about the procedure, methods and intention of the results. Participation was voluntary and nurses were not forced to participate. The researcher explained the research to the participants, and participants were allowed to ask questions. The respondents were informed about their right to withdraw their participation in the study as and when they wished to do so. The respondents were assured that should they wish to withdraw from the study they would not be prejudiced against in any way whatsoever. Return of completed questionnaires was considered informed consent. All the above information

was also included in the participant information sheet that accompanied the questionnaires.

No identifying details such as names or identity numbers were required in the biographical questionnaire; thus anonymity was ensured. The questionnaires were sent in envelopes, so that once the questionnaires were completed, they could be sealed. This ensured confidentiality. The collected data will be kept by the researcher and will be disposed of once the study has been completed. An executive summary of the research will be made available to the organisation.

3.11 Concluding comments

This chapter sought to clarify the aim and purpose of this study, and to outline the research question. It presented the research design and the research hypotheses, it outlined the sample and described the measuring instruments. The statistical procedures that were used were also outlined, and the ethical considerations were discussed. The results of the statistical analyses are presented in the following chapter.

CHAPTER 4

RESULTS

This chapter presents the results of the research study. It specifically represents the descriptive and inferential statistics. The descriptive statistics were used to describe the characteristics of the sample. The inferential statistics were performed to compare the psychological functioning of the two samples or two groups of nurses. The data was analysed by running Analysis of Variance statistics (ANOVA) on the Statistical Analysis Software (SAS). The chapter includes the internal reliabilities of the scales, means, standard deviations and the ANOVA results. Results are considered significant at 5% level of significance.

4.1 Reliabilities of the measuring instruments

Cronbach alpha is a measure of the internal consistency of an instrument. A high internal consistency is indicative of a high degree of generalisability across the items within the instrument (Rosenthal & Rosnow, 1991). The Cronbach alpha coefficients calculated for the purpose of this study were for the following scales: Secondary Traumatic Stress Scale, the Maslach Burnout Inventory (Emotional Exhaustion), the Interpersonal Reactivity Index, the Organisational Commitment Scale (Affective and Continuance Commitment) and the Orientation to Life Questionnaire. These coefficients are presented in Table 1, Table 2, Table 3, Table 4 and Table 5 below respectively:

4.1.1 Secondary Traumatic Stress Scale

Table 1: Table displaying the reliabilities for the Secondary Traumatic Stress Scale

Cronbach Coefficient Alpha	
Secondary Traumatic Stress Scale Total	0.85
Intrusion	0.73
Avoidance	0.72
Arousal	0.57
Level of exposure	0.76
Negative effect characteristics	0.71

Table 1 indicates the reliability of the Secondary Traumatic Stress Scale and its subscales. The overall internal consistency of the Secondary Traumatic Stress Scale was found to be .85. This is very high considering that the acceptable cut-off value is .70 (Rosenthal & Rosnow, 1991, Santos, 1999). A high reliability implies that the items in this instrument measure the same attribute (Welman & Kruger, 2001). The intrusion and avoidance subscales had Cronbach alphas of .73 and .72 respectively. These are good reliabilities. However, the arousal subscale produced a Cronbach alpha of .57, which is not adequate. In terms of level of exposure and negative effect characteristics, they yielded an internal consistency of .76 and .71 respectively. These are considered good because the acceptable cut-off value is .70, which is good.

4.1.2 The Maslach Burnout Inventory (emotional exhaustion)

Table 2: Table displaying the reliability for the Maslach Burnout Inventory (emotional exhaustion)

Cronbach Coefficient Alpha	
Emotional exhaustion	0.86

Table 2 indicates that the reliability of the Maslach Burnout Inventory for the emotional exhaustion subscale is .86, which is a high level of reliability. Thus, the items within the Maslach Burnout Inventory that represent emotional exhaustion, do measure the same attribute (Welman & Kruger, 2001).

4.1.3 The Interpersonal Reactivity Index

Table 3: Table displaying the reliabilities for the Interpersonal Reactivity Index

Cronbach Coefficient Alpha	
Interpersonal Reactivity Index Total	0.72
Fantasy	0.71
Perspective Taking	0.65
Empathic Concern	0.49
Personal Distress	0.58

Table 3 shows the internal consistencies for the Interpersonal Reactivity Index and its subscales. The overall reliability of the IRI was found to be .72, which is a high reliability. The internal consistencies of the subscales are Fantasy (.71), Perspective Taking (.65), Empathic Concern (.49) and Personal Distress (.58). These indices show low to adequate levels of reliability (Rosenthal & Rosnow, 1991).

In order to achieve the overall reliability for the Interpersonal Reactivity Index, some of the scale items had to be removed. For example: Item 3: "I sometimes find it difficult to see things from the 'other guy's' point of view." Item13: "When I see someone get hurt, I tend to remain calm." Item15: "If I'm sure I'm right about something, I don't waste much time listening to other people's arguments." Item 19: "I am usually pretty effective in dealing with emergencies". These items were removed as they had the lowest item-total correlation value. This indicated that these items were not measuring the same construct as the rest of the items in the scale (Santos, 1999). The removal of these

items, increased the Cronbach alpha from .61 to .72, and made the construct more reliable for use as a predictor variable. It ought to be noted that these removed items were items that had to be initially reverse scored during the scoring and analysis process.

Reverse coding is a process where “some questions in a survey are worded such that, high values of a theoretical construct is reflected by high scores on the item, while other questions are worded such that high values of the same construct is reflected by low scores on the item” (DeCosta, 2004, p. 7). Many researchers do this in order to encourage participants to actually read the items in the scales, rather than just picking answers at random. This method may be effective to measure an individual’s consistency and truthfulness, and spotting signs or patterns of social desirability. However, according to DeCosta (2004) this means that a researcher cannot determine the overall score for the scale by simply averaging the items. The researcher would have to reverse or transform the items to be oriented all in the same direction.

4.1.4 The Organisational Commitment Scale

Table 4: Table displaying the reliabilities for the Organisational Commitment Scale (Affective and Continuance Commitment)

Cronbach Coefficient Alpha	
Affective Commitment	0.83
Continuance Commitment	0.74

Table 4 indicates that the Affective and Continuance Commitment Scale yielded reliabilities of .83 and .74 respectively. These were very good, considering that the acceptable cut-off value was .70 (Rosenthal & Rosnow, 1991, Santos, 1999). Thus, the items within these Organisational Commitment Subscales did measure the same attribute (Welman & Kruger, 2001).

However, not all the items were found to be measuring the same construct. The items identified were Item 4 from the Affective Commitment Scale: “I think that I could easily become as attached to another organization as I am to this one.” Item 1: “I am not afraid of what might happen if I quit my job without having another one lined up.” Item 4: “It wouldn’t be too costly for me to leave my organisation now.” The last two items are from the Continuance Commitment Scale. These items showed low item-total correlation values (0.002188, -.092160, and -.136560) respectively when the Cronbach alphas were being calculated. Removal of these items increased the reliability of the Affective Commitment Scale from .77 to .83, and the Continuance Commitment Scale from .55 to .74. It ought to be noted that these removed items were items that had to be initially reverse scored during the scoring and analysis process.

4.1.5 The Orientation to Life Questionnaire (OLQ)

Table 5: Table displaying the reliabilities for the Orientation to Life Questionnaire

Cronbach Coefficient Alpha	
Orientation to Life Questionnaire Total	0.71
Meaningfulness	0.62
Comprehensibility	0.65
Manageability	0.40

Table 5 shows the internal consistencies for the Orientation to Life Questionnaire and its subscales. The overall reliability of the OLQ was found to be .71, which is a high reliability. The subscales yielded internal consistencies of .62 (Meaningfulness), .65 (Comprehensibility), and .40 (Manageability). The reliabilities range from being low to roughly adequate, as they fall below the acceptable cut-off value of .70. However, Kim et al. (1986, as cited in Bernstein, 1992) considered that reliability coefficients of .60 and above were considered to be suitable, and those below .50 were regarded as unacceptable.

The Orientation to Life Questionnaire initially produced a Cronbach alpha of .61, but Item 1: “Do you have feelings that you don’t really care about what goes on around you?”, Item 2: “Has it happened in the past that you were surprised by the behaviour of people whom you thought you knew well?” and Item 10: “Many people – even those with a strong character – sometimes feel like sad sacks (losers) in certain situations, how often have you felt this way in the past?” were found to not measure the same construct as the other items on the Orientation to Life Questionnaire. Thus, these items were removed, and the Cronbach alpha increased to .71, and thus made the construct more reliable. It should be noted that the removed items were items that had to be reverse scored during the scoring and analysis process.

4.2 Descriptive statistics

The term Descriptive Statistics is a number or a set of numbers which captures, summarises or highlights some aspect of a larger set of numbers (Howell, 2004). This section provides a summary of the descriptive statistics as derived from the biographical questionnaire. The biographical questionnaire looked at the participants’ gender, age, tenure and hours worked per week. The descriptive statistics reported in this study include means (the average of a set of scores), standard deviations (an indicator of the variability of a set of data around the mean value in a distribution), frequencies, percentages and minimum and maximum scores (the smallest and largest score obtained) (Rosenthal & Rosnow, 1991).

4.2.1 The sample

Table 6: Table showing the gender demographic proportions for palliative-care nurses ($N=32$) and general-care nurses ($N=35$)

Gender	Palliative care		General care	
	Frequency	Percentage %	Frequency	Percentage %
Male	2	6.25	6	17.14
Female	30	93.75	29	82.86

Table 6 shows that 6.25% of the palliative-care nurses were males and the remaining 93.75% were female. In the general-care nursing sample, 82.86% were female and 17.14% were male. This shows that women were dominating in both groups.

Table 7: Table showing the gender demographic proportions for overall sample ($N=67$)

Gender	Frequency	Percentage %
Male	8	11.94
Female	59	88.06

Table 7 shows that 88.06% of the sample was female, and only 11.94% were male. This high percentage in females was expected, as nursing is considered by most people to be a female-dominated profession.

Table 8: Table showing the age demographic proportions ($N=67$)

AGE	Palliative care		General care	
	Frequency	Percentage %	Frequency	Percentage %
30 years and under	6	18.75	9	25.71
31 to 40 years	11	34.38	9	25.71
41 to 50 years	10	31.25	9	25.71
51 years and over	5	15.63	8	22.86

Table 8 shows that the majority of the participants in palliative care were between the ages of 31 and 40 years, and the majority of general-care nurses fell equally into the age groups of 30 years and under, 31 to 40 years, and 41 to 50 years. The palliative-care sample was found to have 34.38% of its nurses in this age category, and the general-care sample was found to have 25.71% in the same category.

Table 9: Table showing the tenure demographic proportions ($N=67$)

TENURE	Palliative care		General care	
	Frequency	Percentage %	Frequency	Percentage %
5 years and less	11	34.38	8	22.86
6 to 15 years	10	31.25	13	37.14
16 to 25 years	5	15.63	9	25.71
Over 25 years	6	18.75	5	14.29

Table 9 shows that 34.38% of the palliative-care nurses had 5 years and less of work experience, whereas 31.25% had between 6 and 15 years of work experience. Nurses with work experience of between 6 and 15 years constituted 37.14% of general-care staff.

Table 10: Table showing the number of hours worked per week ($N=67$)

HOURS WORKED PER WEEK	Palliative care		General care	
	Frequency	Percentage %	Frequency	Percentage %
Less than 30 hours	1	3.13	1	2.86
30 to 40 hours	16	50.00	16	45.71
40 to 50 hours	13	40.63	16	45.71
More than 50 hours	2	6.25	2	5.71

Table 10 shows that in both groups, the majority of the nurses worked between 30 and 40 hours per week. It was found that 50% of the palliative-care nurses and 45.71% of the general-care nurses fell into this category. 45.71% of general-care nurses also worked between 40 and 50 hours per week. This indicates that there is not much difference in their working hours.

4.2.2 Means, standard deviations and minimum and maximum scores for the measures used

Table 11: Table of the descriptive statistics for palliative-care and general-care nurses, showing the number of nurses, means, standard deviations, and minimum and maximum values.

Variable	N		Mean		Std Dev		Minimum		Maximum	
	Palliative	General	Palliative	General	Palliative	General	Palliative	General	Palliative	General
Secondary Traumatic Stress	32	35	33.22	34.26	10.06	10.61	17	20	51	63
Emotional Exhaustion	32	35	20.41	21.77	13.64	10.87	0	2	46	40
Empathy	32	35	75.69	76.09	11.19	11.45	49	54	95	105
Affective Commitment	32	35	25.09	22.09	5.06	6.43	13	8	35	35
Continuance Commitment	32	35	19.81	19.6	4.34	4.82	11	9	30	29
Sense of Coherence	32	35	44.50	43.23	9.50	9.87	28	23	64	62

Table 11 shows the means and standard deviations for palliative-care and general-care nurses in terms of their secondary traumatic stress, emotional exhaustion, empathy, affective and continuance commitment and sense of coherence. High mean scores on all the measured variables (secondary traumatic stress, emotional exhaustion, empathy, affective and continuance commitment, and sense of coherence) meant that high levels of that particular variable were experienced. For example, palliative-care nurses ($M = 25.09$) had higher affective commitment levels than general-care nurses ($M = 22.09$).

4.3. Statistical analyses relating to hypotheses:

4.3.1 Hypothesis 1: There is no difference in secondary traumatic stress between nurses providing palliative care and nurses providing general health care.

In order to investigate the above hypothesis, Analysis of Variance was conducted to compare the mean scores of the two groups.

Table 12: The following table represents the *F*-value and *p*-value obtained for the Secondary Traumatic Stress variable

Variable	DF	F-Value	Pr > F
Secondary Traumatic Stress Total	(1; 65)	0.17	0.6831
Intrusion	(1; 65)	0.00	0.9601
Avoidance	(1; 65)	1.93	0.1691
Arousal	(1; 65)	0.54	0.4653
Level of exposure	(1; 65)	0.26	0.6109
Negative effect characteristics	(1; 65)	0.07	0.7952

The table above shows that the difference between palliative-care and general-care nurses on secondary traumatic stress was not statistically significant ($F(1, 65) = .17, p$

NS). This means that there was insufficient evidence to believe that a difference in secondary traumatic stress between the nurses offering palliative care and those offering general care existed. Further investigation through analysing the means in Table 11 above, indicated that general-care nurses reported a slightly higher secondary traumatic stress level ($M=34.26$) than palliative-care nurses ($M=33.22$), but this was too small to draw accurate conclusions. With reference to the proposed cut-off score point of 42.5, both groups of nurses had low levels of secondary traumatic stress.

An analysis of the secondary traumatic stress subscales showed that no significant difference was found between the groups. For the intrusion subscale ($F(1, 65) = .00, p NS$), general-care nurses and palliative-care nurses reported almost similar levels, namely ($M=11.11$) and ($M=11.06$) respectively. For the avoidance subscale ($F(1, 65) = 1.93, p NS$), general-care nurses reported a slightly higher level of avoidance ($M=14.40$) than palliative-care nurses ($M=12.84$). On the other hand, with the arousal subscale ($F(1, 65) = .54, p NS$), palliative-care nurses reported a slightly higher level of arousal ($M=9.31$) than general-care nurses ($M=8.73$). However, these differences were too minute to draw accurate conclusions.

4.3.2 Hypothesis 2: There is no difference in emotional exhaustion between nurses providing palliative care and nurses providing general health care.

In order to investigate the above hypothesis, an ANOVA analysis was conducted to compare the mean scores of palliative-care and general-care nurses in terms of their emotional exhaustion.

Table 13: The following table represents the *F*-value and *p*-value obtained for the Emotional Exhaustion variable

DF	F-Value	Pr > F
(1; 65)	0.21	0.6507

The difference between the two groups of nurses in terms of emotional exhaustion was not statistically significant ($F(1, 65) = .21, p \text{ NS}$). This means that there was insufficient evidence to believe that a difference in emotional exhaustion between the nurses from the palliative-care units and those from the general-care units existed. Further investigation through analysing the means in Table 11 above, indicated that general-care nurses reported a slightly higher emotional exhaustion level ($M = 21.77$) than palliative-care nurses ($M = 20.41$), but this was too small to draw accurate conclusions. With reference to the proposed cut-off score point of 27, palliative-care nurses and general-care nurses showed low levels of emotional exhaustion.

4.3.3 Hypothesis 3: There is no difference in empathy between nurses providing palliative care and nurses providing general health care.

In order to investigate the above hypothesis, an ANOVA was conducted to compare the mean scores of palliative-care and general-care nurses in terms of their empathy levels.

Table 14: The following table represents the *F*-value and *p*-value obtained for the Empathy variable

Variable	DF	F-Value	Pr > F
Empathy total	(1; 65)	0.02	0.8862
Fantasy	(1; 65)	1.54	0.2192
Perspective Taking	(1; 65)	0.50	0.4835
Empathic Concern	(1; 65)	0.00	0.9490
Personal Distress	(1; 65)	1.35	0.2491

The table shows that the difference between palliative-care and general-care nurses in terms of empathy was found to be not statistically significant ($F(1, 65) = .02, p NS$). This means that there was insufficient evidence to believe that a difference in empathy levels between the nurses offering palliative care and those offering general care existed. Further investigation through analysing the means in Table 11, indicated that general-care nurses reported a slightly higher empathy level ($M=76.09$) than palliative-care nurses ($M=75.69$), but this was too small to draw accurate conclusions.

The proposed cut-off score for the 28-item Interpersonal Reactivity Index was 70. However, some items from the scale were removed as they were found not to measure the same construct as the other items on the Interpersonal Reactivity Index. With four items having been removed, the potential range of scores for the amended scale ranged from 24 to 120, and thus the proposed cut-off score was 60. With reference to the new proposed cut-off score point, both groups showed high levels of empathy.

An analysis of the empathy subscales showed that no significant difference was found between palliative-care and general-care nurses. For the Fantasy subscale ($F(1, 65) = 1.54, p NS$), palliative-care nurses reported a slightly higher level of fantasy ($M=19.25$) than general-care nurses ($M=17.71$). For the Perspective Taking subscale ($F(1, 65) = .50, p NS$), palliative-care nurses and general-care nurses reported almost similar levels

of perspective taking, namely ($M=17.21$) and ($M=17.91$) respectively. Similarly, with Empathic Concern, palliative-care nurses and general-care nurses reported almost similar levels of empathic concern, namely ($M=26.91$) and ($M=26.97$) respectively. For the Personal Distress subscale ($F(1, 65) = .54, p NS$), general-care nurses reported a slightly higher level of personal distress ($M=13.49$) than palliative-care nurses ($M=12.31$). However, these differences were too small to draw accurate conclusions.

4.3.4 Hypothesis 4: There is no difference in affective commitment between nurses providing palliative care and nurses providing general health care.

In order to investigate the above hypothesis, an ANOVA was conducted to compare the mean scores of palliative-care and general-care nurses in terms of their affective commitment levels.

Table 15: The following table represents the *F*-value and *p*-value obtained for the Affective Commitment variable

DF	F-Value	Pr > F
(1; 65)	4.47	0.0384*

* $p < .05$; means statistically significant

The difference between palliative-care and general-care nurses in terms of their level of affective commitment was found to be statistically significant ($F(1, 65) = 4.47, p < .05$). This means that there was sufficient evidence to believe that a difference in affective commitment between the nurses from the palliative-care units and those from the general-care units did exist. Further investigation through analysing the means in Table 11, indicated that palliative-care nurses reported a higher affective commitment level ($M = 25.09$) than general-care nurses ($M = 22.09$).

The proposed cut-off score for the 8-item Affective Commitment Scale was 20. However, one item from the scale was removed as it was found not to measure the same construct as the other items on the Interpersonal Reactivity Index. With the item having been removed, the potential range of scores for the amended scale ranged from 7 to 35, and thus the new proposed cut-off score was 17.5. With reference to the new proposed cut-off score point, both palliative care and general-care nurses showed high levels of affective commitment. However, palliative-care nurses had a higher level of affective commitment than general-care nurses.

4.3.5 Hypothesis 5: There is no difference in continuance commitment between nurses providing palliative care and nurses providing general health care

In order to investigate the above hypothesis, an ANOVA analysis was conducted to compare the mean scores of palliative-care and general-care nurses in terms of their continuance commitment levels.

Table 16: The following table represents the *F*-value and *p*-value obtained for the Continuance Commitment variable

DF	F-Value	Pr > F
(1; 65)	0.04	0.8507

Table 16 shows that the difference between palliative-care and general-care nurses in terms of their continuance commitment scores was found to be not statistically significant ($F(1, 65) = .04, p NS$). This means that there was insufficient evidence to believe that a difference in continuance commitment levels between the nurses offering palliative care and those offering general care existed. Further investigation through analysing the means in Table 11, indicated that palliative-care nurses reported a slightly

higher continuance commitment level ($M=19.81$) than general-care nurses ($M=19.60$), but this was too small to draw accurate conclusions.

The proposed cut-off score for the 8-item Continuance Commitment Scale was 20. However, two items from the scale were removed as they were found not to measure the same construct as the other items on the Interpersonal Reactivity Index. With the items having been removed, the potential range of scores for the amended scale ranged from 6 to 30, and thus the new proposed cut-off score was 15. With reference to the new proposed cut-off score point, both palliative-care and general-care nurses showed high levels of continuance commitment.

4.3.6 Hypothesis 6: There is no difference in sense of coherence between nurses providing palliative care and nurses providing general health care.

In order to investigate the above hypothesis, an ANOVA analysis was conducted to compare the mean scores of palliative-care and general-care nurses in terms of their sense of coherence levels.

Table 17: The following table represents the *F*-value and *p*-value obtained for the Sense of Coherence variable

Variable	DF	F-Value	Pr > F
Sense of Coherence total	(1; 65)	0.29	0.5937
Meaningfulness	(1; 65)	0.05	0.8263
Comprehensibility	(1; 65)	1.08	0.3021
Manageability	(1; 65)	0.02	0.9012

The table shows that the difference between palliative-care and general-care nurses on sense of coherence was not statistically significant ($F(1, 65) = .01, p NS$). This means that there was insufficient evidence to believe that a difference in sense of coherence between the nurses offering palliative care and those offering general care existed. Further investigation through analysing the means in Table 11 above, indicated that palliative-care nurses reported a slightly higher level of sense of coherence ($M=44.5$) than the general-care nurses ($M=43.22$). This is evidence to the statement above referring to the lack of difference between the two types of nurses.

The proposed cut-off score for the 13-item Orientation to Life Questionnaire was 45.5. However, three items from the scale were removed as they were found not to measure the same construct as the other items on the Interpersonal Reactivity Index. With the items having been removed, the potential range of scores for the amended scale ranged from 10 to 70, and thus the new proposed cut-off score was 35. With reference to the new proposed cut-off score point, both groups of nurses showed a high sense of coherence levels.

An analysis of the sense of coherence subscales shows that no significant difference was found between palliative-care and general-care nurses. For the meaningfulness subscale ($F(1, 65) = .05, p NS$), general-care nurses ($M=15.09$) reported a marginally higher meaningfulness score than palliative-care nurses ($M=14.88$). For the comprehensibility subscale ($F(1, 65) = 1.08, p NS$), palliative-care nurses reported a slightly higher level of comprehensibility ($M=18.06$) than general-care nurses ($M=16.69$). On the other hand, with the manageability subscale ($F(1, 65) = .02, p NS$), palliative-care nurses and general-care nurses reported almost similar levels of manageability, namely ($M=11.56$) and ($M=11.46$) respectively. However, these differences were too small to draw accurate conclusions.

Although not directly hypothesised in the current study, it was felt that it would be of interest to establish whether there was a relationship between organisational

commitment and age. In order to test for this, the researcher made use of the statistical technique of the Pearson Correlation, which measured whether there was a relationship between affective and continuance commitment and age, and what the direction of the relationship was. The results of this analysis are presented below.

4.4 Statistical analyses relating to secondary hypothesis

4.4.1 Affective Commitment and age

Table 18: Correlation between affective commitment and age

	r-Value	Pr > F
Affective Commitment	0.18715	0.1294

The table shows the relationship between affective commitment and age. This relationship was found not to be statistically significant ($r = .19, p NS$). This means that there was insufficient evidence to believe that a correlation relationship exists between affective commitment and age.

4.4.2 Continuance commitment and age

Table 19: Correlation between continuance commitment and age

	r-Value	Pr > F
Continuance Commitment	0.32288	0.0077 *

* $p < .05$

The table shows the relationship between continuance commitment and age. This relationship was found to be statistically significant ($r = .32, p < .05$). This means that there was sufficient evidence to believe that a correlational relationship existed between affective commitment and age. This relationship was found to be moderate and positive. Thus, as nurses become older, whether they are working in palliative or general care, they still show affective commitment that is associated with remaining in their organisations.

4.5 Concluding comments

The present research study explored the difference in emotional well-being between palliative-care and general-care nurses. This difference was explored in terms of secondary traumatic stress, emotional exhaustion, level of empathy, affective and continuance commitment and sense of coherence. In order to determine whether there was a significant difference, ANOVAs were conducted. Secondary analyses were also conducted to determine the relationship between affective and continuance commitment with age. Pearson Correlations were conducted to determine the relationships and their direction.

The following is a brief summary of findings:

- **Hypothesis 1:** No significant differences were identified between palliative-care and general-care nurses in terms of their secondary traumatic stress. Further investigation showed that no differences were also found between both groups in terms of the subscales (intrusion, avoidance and arousal). With reference to the level of exposure and negative-effect characteristics, no significant difference was found between palliative-care and general-care nurses.

- **Hypothesis 2:** There was no significant difference between palliative-care and general-care nurses with respect to their emotional exhaustion levels.

- **Hypothesis 3:** No significant differences were identified between palliative-care and general-care nurses in terms of their level of empathy. Further investigation of the empathy subscales (fantasy, perspective taking, empathic concern and personal distress) also yielded no significant differences between the two groups.

- **Hypothesis 4:** Affective commitment was found to be significantly different between palliative-care and general-care nurses.

- **Hypothesis 5:** There was no significant difference between palliative-care and general-care nurses with respect to their continuance commitment.

- **Hypothesis 6:** There was no significant difference between palliative-care and general-care nurses in terms of their level of sense of coherence. Further investigation of the sense of coherence subscales (meaningfulness, comprehensibility and manageability) also yielded no significant differences between the two groups.

Secondary analyses

- There was no correlation between affective commitment and age.
- Continuance commitment was found to be significantly correlated to age. This relationship was found to be positively correlated.

The findings of this study will be discussed in the following chapter.

CHAPTER 5

DISCUSSION

5.1 Introduction

The research has focused on the well-being of palliative-care nurses, since their roles of taking care of terminally ill patients have an impact on their well-being. It was suggested that, owing to the nature of their profession, palliative nurses are highly at risk of developing secondary side effects. As a result of relationships that may form between nurses and their patients, they are vulnerable to developing secondary traumatic stress or compassion fatigue. This effect of exposure to terminally ill patients, impacts on the nurses' well-being, and this affects the quality of patient care they offer. Although nurses show empathy towards their patients in such circumstances, too much of this may lead to emotional fatigue and exhaustion. This chapter discusses the results of this study in relation to the literature presented.

The study aimed to determine the difference between palliative-care and general-care nurses in terms of their emotional well-being. This was done by comparing the scores of palliative-care and general-care nurses on various measures that were linked to emotional well-being. These variables were secondary traumatic stress, empathy, emotional exhaustion, affective and continuance commitment, and sense of coherence. This study also attempted to determine the relationship between age and organisational commitment.

In this chapter the results obtained, the limitations of the study and recommendations for future research are discussed.

5.2 Statistical analyses relating to the hypotheses

The findings of this study indicated that there was no significant difference between palliative-care and general-care nurses in terms of secondary traumatic stress. The study failed to reject the hypothesis that there is no difference in levels of secondary traumatic stress between nurses offering palliative care and those offering general care to their patients.

The results could imply that nurses who provide palliative care and those who provide general care generally experience the same levels of traumatisation when exposed to any traumatic material. With reference to the proposed cut-off score point, both palliative-care and general-care nurses showed low levels of secondary traumatic stress.

Dominguez-Gomez and Rutledge (2009) stated that secondary traumatic stress referred to exposure to a person who is traumatised or suffering, and eventually the nurse who provided the care would be traumatised in the process of providing such care. The findings of this study indicate that although both palliative-care nurses and general-care nurses may be exposed to traumatic events, they do not, however, have high levels of secondary traumatic stress. This could be due to a number of reasons, stemming from the presence of adequate coping strategies and the necessary personal and environmental factors that are available to both palliative-care and general-care nurses.

With reference to Dutton and Rubinstein's (1995) model for secondary traumatic stress reactions, coping strategies affect the development and intensity of secondary traumatic stress. Thus, both palliative-care and general-care nurses in this study may have had sufficient personal and professional coping strategies. Both groups of nurses attended to their personal needs and they made it a point to develop supportive relationships with their colleagues. In addition, health management acknowledged that the working environments of palliative-care and general-care nurses could be stressful, and thus

they ensured that both groups of nurses had the necessary resources and coping initiatives available to them in order to effectively handle the pressures that were associated with the job.

In addition, the two groups of nurses both had their tenures and experience as personal factors that acted as mediators between the level of exposure to traumatic material and the development of secondary traumatic stress (Dutton and Rubinstein, 1995). Having been in the profession for a while and having had experience, both groups of nurses were equipped with the necessary knowledge and skills of how to handle demands and pressure of traumatic situations, thus accounting for the low levels of secondary traumatic stress that were shown. In addition, environmental factors such as social support, cultural and social norms, and the organisation's response may have had a major impact on the results that were received. The support that all these nurses received from their peers, supervisors and family enabled them to work against the negative effects of exposure to traumatic material (Douglas, 2010; Ponte et al., 2004). The organisation and health management's knowledge of the social and cultural factors that are associated with the nurses' reactions, aided them in understanding palliative-care and general-care reactions to traumatic material, and therefore allowed them to develop the necessary resources and coping initiatives. These resources and initiatives enabled them to mitigate the development of high levels of secondary traumatic stress that would have affected their service delivery, and hampered effective quality of patient care.

Further analysis of the secondary traumatic stress construct revealed that there was no difference in the intrusion levels of palliative-care and general-care nurses. This could imply that both groups did not have recurrent and intrusive recollections of the traumatic events that their patients might have undergone (Bride et al., 2003). Therefore, although all these nurses might have identified with their patients, they did not have distressing dreams of the traumatic material they were exposed to, and this accounted for the low levels of secondary traumatic stress that were shown.

On measures of avoidance, no difference was established between the two groups of nurses. As per Figley's trauma transmission model (Figley, 1995) this revolves around the notion of empathy and other factors, the avoidance symptoms include the ability of the nurse to disengage from the helping process. Thus in taking the findings of this study into account, both palliative-care and general-care nurses were able to emotionally detach themselves from their work. Their ability to do this may be attributed to their having adequate personal coping strategies, and being able to balance their emotions when it came to their personal and profession roles. Experiencing avoidance symptoms may display a lack or loss of interest or participation in significant activities, detachment and disengagement from others and a restricted range of affect (Bride et al., 2003). Taking the South Africa nursing context into account, particularly in Johannesburg, there have been many complaints in the past due to the lack of empathy and affect that nurses, mainly general-care nurses, presumably have had for their patients. This impacted on the quality of their patient care. However, this was not the case. The nurses were fully involved when it came to the care of their patients.

Both groups showed low levels of secondary traumatic stress. This further indicated that there were no differences in their arousal levels, as was confirmed by the findings of this study. The nursing environment is highly characterised by so much emotional and stressful content that nurses may display symptoms of anxiety when exposed to traumatic material (Bride et al., 2003). However, the occurrence of these arousal symptoms was low, and may have not been that intense as they had not induced the presence of secondary traumatic stress in palliative-care or general-care nurses. In addition, the scale used to measure secondary traumatic stress aimed to measure the construct over seven days, it could therefore be inferred that both groups of nurses had no intensively defining arousal symptoms that could manifest into secondary traumatic stress during the completion of the questionnaire.

With reference to Dutton and Rubinstein (1995) it can thus be inferred that palliative and general nurses were exposed to different traumatic material. However, the duration of

exposure, the level of intensity and impact may have been similar, and thus no differences were observed among the nurses in terms of their secondary traumatic stress levels. In addition, these circumstances may have led to low levels of secondary traumatic stress being shown, because of the presence of sufficient resources and coping mechanisms.

The study failed to reject the hypothesis which stated that there would be no difference between palliative-care and general-care nurses in terms of their emotional exhaustion levels.

With reference to the proposed cut-off score point, the two groups of nurses showed equally low levels of emotional exhaustion. The results of this study could be a reflection of what is currently happening in both palliative-care and general-care units around Johannesburg. Although it may generally be found that all nursing personnel components are often short staffed, and the nurse-to-patient ratio has to increase, both groups of nurses have learnt to adapt, and have found ways to cope with the work overload.

Within both nursing environments, nurses were exposed to emotionally demanding and often draining circumstances, because these environments were often characterised by exposure to traumatic material, though at different intensities. However, through this, both groups of nurses did seem to have the necessary resources and coping strategies to have remained functioning in these stressful environments. These resources could range from peer or supervisor support, through to organisational initiatives such as continuance job rotation or allowing the nurses to take the necessary breaks they may require. Such resources and coping strategies enable all nursing personnel to deal with the demands and pressures they may encounter, in order to ensure that they are able to effectively look after their patients.

In addition, these low levels of emotional well-being may infer that palliative-care and general-care nurses have feelings of task meaningfulness, where both groups of nurses are able to acknowledge the significance and importance of the type of care they provide, and how it benefits their patients. This can help all of them to manage their emotions when they encounter situations where they experience cases of relapse or seeing their patients time and time again without any signs of recovery, behaviour change or patient comfort (Benbow, 1998; Demeari et al., 2000; Maslach & Goldberg, 1998).

Thus, when all these nurses are exposed to traumatic material, they have the necessary emotional and energy resources in place to help them function effectively and provide efficient patient care. Because of the low levels of emotional exhaustion, these groups of nurses are able to be emotionally present and they have the capacity for caring and displaying compassion (Douglas, 2010). This impacts positively of effective care delivery. Therefore, the more that can be done to support nurses and their emotional needs, the sooner the negative impact of emotional imbalances can be minimised for patients, health organisations and the nurses themselves.

The results of this study found that the difference in empathy levels between palliative-care nurses and general-care nurses was not significant. The researcher failed to reject the hypothesis that there was no difference in empathy levels between nurses who provide palliative care and those who provide general care.

The results could imply that these nurses both had empathy for their patients. In accordance with Barclay (2007), empathy is understood as the factor that sparks human concern for others. Nurses work in the human service sector, and therefore empathy is essential within this profession. Within their profession, both palliative-care and general-care nurses are capable of feeling emotions and having empathic connections with others as a form of human communication. In accordance with Bergdahl et al. (2007),

empathy is very important in the efforts to create a good relationship. From this, one may decipher that empathy is fundamental in the nursing profession today.

With reference to the proposed cut-off score point, both palliative-care and general-care nurses showed equally high levels empathy. In accordance with Raiziene and Endriulaitiene (2007), empathy is crucial to the nurse's involvement with changing health demands arising from increased technology, different health or illness patterns in the management of chronic and terminal care. It is thus understandable why a significant difference between palliative-care nurses and general-care nurses could not be established in this study, because they were both expected to display empathy towards their patients. These high levels of empathy could be ascribed to both palliative-care and general-care nurses providing care and adequate support to their patients, and thus enabling them to connect and work effectively with their patients in order to deliver the best quality of care. By providing this care, an empathic relationship may develop between the nurses and their patients.

Further analysis of the subscales of the Interpersonal Reactivity Index, palliative-care nurses showed no difference in level of fantasy in comparison with general-care nurses. This could imply that both palliative-care and general-care nurses can imagine themselves in the same situations as their patients. This gives the nurses the big picture, and provides them with answers to the question: "What if it happened to me?" In terms of the perspective-taking subscale and the empathic concern subscale, palliative-care and general-care nurses reported almost similar levels for each. Thus, in accordance with Webster (2010), both groups can adopt the point of view of their patients, and they both indicated having an ability to feel compassion, warmth and concern for patients in distress. Thus all these nurses are able to form an empathic connection with their patients, whereby they can put themselves in the shoes of their patients, and understand the reality of their circumstances and thus be compassionate towards them.

For the personal distress subscale, general-care nurses showed no difference to the levels reported by palliative-care nurses. It could be expected that palliative-care nurses would not have a greater level of discomfort or feelings of fear when they interact and care for their terminally ill patients, as compared to general-care nurses who do not have as much experience in dealing with traumatised patients. However, as Dutton and Rubinstein (1995) outlined, general-care nurses can be exposed to at least one traumatic event, and they too may not have feelings of discomfort or fear when observing their patients' negative experiences or interpersonal situations. Owing to the unexpected nature of the health-care profession, both palliative-care and general-care nurses need to remain professional at all times in order to ensure that they provide the best quality of care that is possible. Thus, both groups may be prone to sympathetic responding, and they may therefore tend to be higher in self-regulation of emotions, but still be emotionally intense (Barclay, 2007).

With reference to Dutton and Rubinstein's (1995) model for secondary traumatic stress reactions, empathy forms part of one of the components of the model, namely the personal characteristics component. This component illustrates the mediating variable of secondary traumatic stress. Therefore empathy is hypothesised to mediate the relationship between level of exposure to traumatic material and the nurses' outcomes. Lower levels of empathy have been shown to result in reduced organisational commitment (Raiziene & Endriulaitiene, 2007). Both of these further contribute to higher emotional exhaustion levels. However, with reference to the results found in this study, the higher levels of empathy that palliative-care and general-care nurses showed, contributed to the lower levels of emotional exhaustion among the two groups of nurses. Thus, in order to reduce emotional exhaustion, one needs to promote and develop empathy. As outlined by Webster (2010) empathy builds trust, and patients who perceive nurses as empathic feel accepted and valued. This impacts on the nurse-patient relationship in a positive way, as the quality of treatment that the patient is given may increase.

The findings of this study on affective commitment between nurses who provide palliative care and those who provide general care indicated a significant difference in the affective commitment levels of these nurses. Thus the hypothesis that no difference existed between palliative-care and general-care nurses was rejected.

The results found here acted in accordance with what has been found in previous research (Meyer & Allen, 1991; Muthuveloo & Rose, 2005). Within the nursing profession, affective commitment emerged as the most prevalent theme from the organisational commitment model. This is especially evident within the palliative-care units, taking into account the emotional atmosphere that exists. This is confirmed by the current study when it was found that palliative-care nurses reported a higher affective commitment level than general-care nurses. Although, the proposed cut-off score point outlined that both nursing groups showed high levels of affective commitment, palliative-care nurses showed a much higher level of affective commitment than general-care nurses.

With reference to Muthuveloo and Rose's (2005) definition of affective commitment, palliative-care nurses have an emotional attachment to their organisation. This attachment is based on positive feelings and emotions regarding the organisation. Thus this could imply that palliative nurses could have identified with the goals of the organisation and their desire to remain part of it. As such they commit to their organisation because they want to. Furthermore, this emotional attachment arises as a result of the emotional nature of the kind of care that palliative nurses provide. As Selecky et al. (2005) and Twycross (1999) outlined that palliative care is concentrated on the reduction of the severity of disease symptoms rather than aiming to cure or reserve the progression of the disease. On the other hand, general care primarily requires that nurses care for their patients by lessening the severity of their disease and pain symptoms with the aim of curing them. Thus, the emotional involvement and attachment to the organisation is more likely to be observed amongst palliative-care than general-care nurses.

Palliative care further offers a support system to the patient and to the patient's family (Twycross, 1999). This empathic relationship that exists between the nurses and their patients, as well as with the patient's family could contribute to the emotional attachment that palliative nurses have to their profession. This could perhaps be related to the understanding that palliative-care nurses have about the magnitude of support that their care provides to those around them, and thus they become more aware of the significant difference they make to others. This does not imply that general nurses are not empathic and have no emotional connection with their health organisation, it is just inferred that palliative nurses could acknowledge the extent to which their care has on patients regardless whether they are cured or have recovered, whereas general-care nurses may base the effectiveness of the care they provide on the recovery and curing of their patients.

With reference to Dutton and Rubinstein's (1995) model for secondary traumatic stress reactions, the presence of a high affective commitment level could have had a great influence on nurses in terms of their contribution to patients, and thus somewhat "overshadow" the negative consequences that may result. In view of the model, nurse's attachment to and identification of the organisation's mission and goals can have some kind of mediating effect of the relationship between exposure to trauma and secondary traumatic stress. This would contribute to the personal factors component of the model. It therefore outlines the importance of the health organisation to support and invest in its staff so that nurses would prefer to remain committed to the organisation and execute the organisation's goals, which should be in line with their own personal work goals.

In terms of the continuance commitment measure, the results of this study found no significant difference in continuance commitment levels between palliative-care nurses and general-care nurses. This could imply that palliative-care nurses and general-care nurses both have continuance commitment, or that they do not.

With reference to the new proposed cut-off score point taking into account the two items that were removed, both groups of nurses showed equally high levels of continuance commitment. Both groups therefore had a higher tendency to weigh up their options of leaving their organisation in terms of monetary value.

Both nursing environments can be emotionally and physically taxing. This could probably be ascribed to issues of work overload, understaffing, little task meaningfulness, exposure to traumatic material and lack of support and adequate resources. Thus, owing to the stressful nature of their work roles, nurses may want to leave their organisation, but as a result of the high levels of continuance commitment that were shown, all these nurses thus may prefer to remain in their respective care fields because they have to. Both groups showed having similar perceptions of the high costs that might be incurred when deciding to leave the health organisation. These costs can either be economical, where the nurses may worry about pension accumulation and financial strain, or social, where nurses are concerned about the relationships they have formed with their co-workers.

It is rare to find an employee who does not consider the financial repercussions that he or she may incur if deciding to leave their job. The findings that these nurses were not different in terms of continuance commitment, established what past research has found, that the nurses have taken the financial implications associated with leaving the organisation into account (Bergh et al., 2004). Nonetheless, any nurse, whether palliative or general, who remains committed to his or her organisation because of financial woes may hamper the quality of patient care. This could be in relation to the nurses who remain in the organisation for personal and concealed reasons, rather than them having a vested empathic interest in the care of the patients and identifying with the organisation's mission. However, the results of the study did show that both nursing groups showed higher affective commitment levels, inferring that all of them wanted to stay with the organisation because they identified with its goals and mission, and

because they considered the financial implication implications. However, palliative nurses have a much greater empathic reason to stay.

In terms of affective and continuance commitment, it ought to be kept in mind that there is commitment to the organisation and commitment to the occupation. It would therefore be beneficial for future research to distinguish between the two forms of commitment, and establish where the commitment of nurses, either palliative or general care, lies.

The results of this study found that the difference in sense of coherence levels between palliative-care nurses and general-care nurses was not significant. It was also found that the sense of coherence subscales reported no significant differences between the two groups.

These findings could imply that palliative-care and general-care nurses have levels of sense of coherence that are not different from each other. This infers that both these nursing groups have the belief that life is comprehensible, manageable and meaningful. They could have similar levels of being confident that internal and external environmental stimuli are structured, predictable and explicable, and that they have adequate resources available to meet the demands stemming from these stimuli (Antonovsky, 1987).

The most defining characteristics that are different between the two groups are the type of care they provide, the aim of the care they provide and the level of exposure to traumatic material they may encounter. Owing to the stressful nature of their working environments, similar levels of sense of coherence between the two groups were expected. With reference to the proposed cut-off score point taking into account the items that were removed, both the palliative-care and general-care nurses showed an equally high sense of coherence levels. The existence of high levels of sense of coherence allows all these nurses to ensure that they are not tied to one type of

resource or coping style. Both showed great flexibility in the possible coping strategies they used (Feldt, 1997).

The findings of this study suggest that, although the working environments of these nurses may be perceived as stressful, both groups have the necessary coping mechanisms confidence in their capacity to overcome stressors in order to provide the best quality of patient care. Within both environments, the caring of patients was very important to the nurses as well as to health management. Because there a central goal between management and its staff, and the commitment to the process of working together to provide optimal care is mutual. This shared trust and responsibility ensured that management provided palliative-care and general-care nurses with the necessary and adequate resources to function effectively within their respective environments.

The high sense of coherence levels could be ascribed to management providing an open and supportive structure where all nurses were able to communicate their experiences and problems, so that they were able to be given coping strategies to help them function at their best. These higher levels of sense of coherence allowed both palliative-care and general-care nurses to utilise the resources available to them to lessen negative outcomes, and thus they were able to show resilience to stress.

Sense of coherence, in reference to Dutton and Rubinstein's (1995) model may be categorised under the personal characteristic component of the model. This is where it acts as a mediator between the exposure to traumatic material and the nurses' outcome that may result from that. Because of the high levels of sense of coherence that all the nurses had, they were able to deal with the challenges of a stressful situation. This validated the research conducted by McSherry and Holm (1994), where it was found that individuals with low SOC reported being more stressed or anxious, while those individuals with high levels of SOC were able to manage stressful challenges.

According to McSherry and Holm (1994) when nurses experienced secondary traumatic stress, their ability to tolerate affect, maintain a sense of self and inner sense of connection with others was compromised. However, lowered levels of secondary traumatic stress were found among both palliative-care and general-care nurses, and this could be attributed to the high levels of sense of coherence that was present among the two groups. This further implies that because of the high SOC levels, both groups of nurses were able to function effectively within their working environment, as they perceived it as being manageable, comprehensible and meaningful. They may also have believed that they had the necessary resources and coping strategies to counteract any negative impact their work roles might have transmitted. Thus, owing to the high sense of coherence levels, all these nurses may be perceived as having decreased levels of work stress, emotional exhaustion, depression and anxiety. Hence, the low levels of emotional exhaustion that were obtained may also be attributed to the higher levels of sense of coherence among the two groups.

No significant differences were found between palliative-care and general-care nurses in terms of the sense of coherence subscales. For meaningfulness, taking into account the high levels of sense of coherence, general-care nurses and palliative-care nurses may have perceptions and feelings that life is making emotional sense. Taking into account the emotionally demanding environments that both these groups of nurses work in, these findings suggest that they may have no difficulty making emotional sense of their roles to their patients, especially when they are unable to effectively validate the meaningfulness and the positive impact their care has on their patients.

For the comprehensibility subscale, no difference between palliative-care nurses and general-care nurses were reported. The high levels of sense of coherence enable both types evaluate the stimuli from their internal and external environments, as being consistent, structured and explicable. These stimuli have been identified as workplace pressures and demands, indirect traumatisations, needs by patients and their families, and any emotional situations requiring attention (Antonovsky, 1987). Thus, both groups

of nurses could have the necessary criteria and stamina to work in highly stressful and chaotic environments, and they thus may be able to simplify and apply the best approaches necessary.

In the same vein, with the manageability subscale, palliative-care nurses and general-care nurses reported almost similar levels of manageability. Taking into account the non-significant results obtained within the study, both palliative-care and general-care nurses believe that they have adequate resources to meet the demands of their working environments. This extends to Dutton and Rubinstein's (1995) model, where this construct may also form part of environmental factor component of the model that mediates the relationship of exposure to traumatic material and secondary traumatic stress. This is when the nurses feel that resources are at their disposal, and that these are sufficient to meet the demands and pressures of their working environments. Such resources include social support, that can be either formal or informal, and necessary skills or relevant knowledge.

Without a sound level of sense of coherence, nurses may begin to feel isolated from and alienated by their organisation. This could lead to additional issues of nurses being misunderstood by health management. Furthermore, communication between the nurses and health management becomes compromised, causing health management and nurses not to have the same goals and vision for patient care. This may consequently impact on the quality of patient care in a negative way. Health management thus needs to continue and maintain these higher levels of sense of coherence amongst its staff. According to Antonovsky (1979) and Feldt (1997) the stronger the nurses' sense of coherence, the greater their well-being, as sense of coherence has been associated with competence, general well-being, life satisfaction, functional status and psychological and physical health.

Although not directly hypothesised in the current study, it was felt that it would be of interest to establish whether there could be a relationship between organisational commitment and age. The researcher measured whether there was a relationship between affective and continuance commitment and age, and what the direction of the relationship was.

The results of this study found no significant relationship that existed between affective commitment and age. However, evidence was found that the relationship that existed between continuance commitment and age was significant. Thus, age has shown to have a positive relationship with at least one of the constituents of organisational commitment, as outlined by contemporary authors (Lok & Crawford, 2001; Muthuveloo & Rose, 2005)

As per the literature, affective commitment is based on the nurse's identification with and involvement in the organisation (Johnson & Chang, 2006; Muthuveloo & Rose, 2005; Viljoen & Rothmann, 2009). With reference to this study, the older palliative and general-care nurses become, the less they will perceive emotional attachment to the organisation as being a good enough reason to remain in that organisation. Because both the palliative-care and general-care nursing environments are emotionally taxing, health management needs more lucrative ways of retaining the nurses, rather than depending on their identification with the organisation's goals and mission. Nurses may perceive their identification and involvement in the organisation as not being sufficient to draw them into staying.

However, in terms of continuance commitment, which revolves around the cost that would be incurred if an individual were to leave his or her job, nurses were found to have a significantly moderate and positive relationship between their age and their intentions to stay within the organisation (Johns & Saks, 2005; Muthuveloo & Rose, 2005). Therefore, as nurses; either palliative or general, grow with age, they prefer to

stay in their respective organisations. Although the nursing environment is characterised by many stressors, nurses would first analyse their surroundings and determine whether leaving their place of employment would be in the best interest for them from a financial perspective, and not from an emotional or psychological viewpoint.

The results obtained confirm past research, by outlining that as workers grow older, alternative employment opportunities become scarcer (Johnson & Chang, 2006; Mutheveloo & Rose, 2005; Viljoen & Rothmann, 2009; Yew, 2008). In addition, older nurses may also stay because of their position in the hierarchy of the organisation, or because of having cognitively reasoned their motives for having to stay in the organisation. Thus, age can function as a predictor of continuance commitment among nurses.

Thus, it has been established that the nursing profession has been associated with quite a few negative outcomes that may impact on the nurse's decision to remain in their profession or leave. Furthermore, the age of a nurse can influence his or her organisational commitment. Older nurses tend to remain committed to their organisation as it may be hard to find lucrative employment elsewhere.

5.3 Limitations of the study

Although detailed attention has been given to the contents, literature, methodology and statistical analyses of the study, a number of limitations should be acknowledged. Thus, the following section describes the limitations of the study in respect of the research design, sample, measuring instruments and so forth.

5.3.1 Sample

Owing to time constraints, it was not possible to attract a large-sized sample. The sample size obtained in this study was considered to be relatively small. It consisted of 67 participants, 32 from palliative-care and cancer units and 35 from general-care units. This is relatively small considering past researchers who were using nurses as participants. Owing to the relatively low number of participants, there may be issues with the generalisability of the results. In addition, finding the sample in one hospital also reduced the chances of generalising the findings of this study to the national picture. Thus, it would have been more plausible to recruit participants from more than one hospital. Hence, the findings of the study may not hold true across all palliative-care nurses and across all health institutions in Johannesburg and South Africa. This is because there may be differences in the amount and level of traumatic material in Johannesburg as compared to other cities in South Africa, and nurses may have different coping mechanisms and supportive structures across the country.

5.3.2 Cross-sectional study

The study made use of a cross-sectional research design. This type of research design can make it difficult to prove causal relationships (Van der Colff & Rothmann, 2009). With reference to palliative care, it would not be that easy to empirically establish whether palliative-care nurses have developed secondary traumatic stress or emotional exhaustion owing to their constant exposure to their terminally ill patients, especially

given the time frame the study was conducted in. Therefore, a longitudinal research design in order to analyse causal relationships would have been a preferred research design method. In addition, the development of secondary traumatic stress and emotional exhaustion is not immediate, it is a gradual process.

5.5.3 Use of the Secondary Traumatic Stress Scale

Stemming from the above limitation, the use of the Secondary Traumatic Stress Scale could also have been problematic. As far as the researcher could establish, the scale has rarely been used in the South African context, and thus its reliability had to be calculated. Although the scale proved to have a very good internal consistency, the researcher found the period of time that was associated with this scale a bit worrying. The scale required participants to read the list of statements made by persons who have been impacted on by their work with traumatised clients, and the participants then had to indicate how frequently the statement had been true for them during the past seven days.

This time frame, seven days, does not seem like a plausible period of time to establish whether a nurse has developed secondary traumatic stress. With reference to the sample of this study, although palliative-care nurses may have had an encounter with or been exposed to patients who had experienced trauma within those seven days, it does not automatically imply that they developed secondary traumatic stress. Secondary traumatic stress is not a phenomenon that can quickly appear and quickly disappear, it gradually builds over time when nurses take care of traumatised patients and have compassion for them. This is particularly relevant in the case of palliative nurses, who deal with the aftermath of traumatic situations, and not immediately after it has taken place. Furthermore, it requires greater initiative, coping styles and support to cope with secondary traumatic stress.

Thus, the determining period of seven days for secondary traumatic stress could have impacted on the results that were obtained, where palliative-care and general-care nurses showed no difference in secondary traumatic stress levels. In addition, palliative-care and general-care nurses did not complete the questionnaire within those same seven days. There was a lapse in the time of completion. Thus, the time frame of measuring of this variable was not parallel for the two groups of nurses, and this could have impacted on the results obtained. Hence, the findings of this study in terms of the secondary traumatic stress measure cannot be generalised.

Other scales, rather than the Secondary Traumatic Stress Scale, could possibly have been used to measure secondary traumatic stress. In South African studies done by Harinarain (2007), Hlengani (2006) and Macritchie (2006) the Compassion Fatigue Self-test was used to measure secondary traumatic stress. This instrument was devised by Stamm and Figley in 1996, and it showed good reliability in the South African context (Harinarain, 2007; Hlengani, 2006; Macritchie, 2006). For future recommendations, the Compassion Fatigue Self-test could be used, especially in comparative studies.

5.5.4 Quantitative versus qualitative research methodology

The current study used a quantitative research methodology to gather data from both palliative-care and general-care nurses. Although this type of research has its advantages, a qualitative research method might have been even more beneficial.

Many international studies involving palliative-care nurses and qualitative methods of gathering information have been undertaken. In a study done by Georges, Grypdonck and De Casterle (2002), a qualitative approach was used in order to elicit the way nurses working on a palliative-care ward in an academic hospital perceived their role, and thus to gain insight into and a better understanding of the problems the nurses may encounter. Owing to the delicate nature of the palliative-care profession, such a

research approach would have been very beneficial and informative, as more insight and understanding would have been achieved in terms of the nurses' roles and working conditions.

5.3.5 Social desirability

The tendency to give a socially desirable response has been noted in past research studies. Social desirability is defined as the tendency for participants to respond to social norms, or in a manner in which they believe the researcher would desire. So, the respondents wish to provide answers that are socially appropriate and acceptable rather than how they truly feel or believe (Beere, Pica & Maurer, 1996). The nurses' responses might not have reflected their honest opinions; they might have exaggerated their responses simply to impress the researcher.

5.6 Implications of the current research

Although there were quite a number of limitations to this study, the findings of the current research make a contribution to the field of nursing research. The findings also add further understanding to the concepts of secondary traumatic stress, empathy, emotional exhaustion, affective and continuance commitment and sense of coherence, as well as palliative care. These contributions are relevant within the South African context, where literature and empirical research are limited. This study has theoretical and practical implications for both palliative-care and general-care nurses, as well as for health management.

Theoretical implications encompass the provision of a clear understanding of the concepts of secondary traumatic stress, empathy, emotional exhaustion, affective and continuance commitment, a sense of coherence and what impact these could directly have on the nurses and indirectly on the patients. More importantly, this research shows

the extent to which the nursing environment could be fragile, and that having the necessary resources and coping strategies in place could lessen the development of secondary traumatic stress and compassion fatigue. Furthermore, a better understanding is gained of why a higher sense of coherence level is important, and may positively impact on levels of secondary traumatic stress, and may thus further impact on organisational commitment.

With reference to Dutton and Rubinstein's (1995) model for secondary traumatic stress reactions for nurses who are working with traumatised patients, attention to the environmental factor component highlights a few practical implications. Practical implications of this study outline the need for health management to implement strategies for preventing the development of secondary traumatic stress and managing the onset of emotional exhaustion. This should involve finding ways to promote a good work-life balance, maintaining and upholding personal and professional boundaries and having consulting or supervising initiatives in place (Dutton and Rubinstein, 1995; Fredrickson & Joiner, 2002; Hlengani, 2006). Awareness of the issues of secondary traumatic stress and emotional well-being need to be raised, so that nurses understand the challenges of their profession, and know what consequences may result from their caring roles. The health organisation should also continue to aim at maintaining and improving the sense of coherence of its staff, because as stated by Feldt (1997) and Hart et al. (1991) the stronger the sense of coherence, the greater the well-being and wellness of staff members. This highlights the importance of sense of coherence as being a coping mechanism or resource for nurses who are working in palliative-care units.

Overall, management and health organisations need to continue to find constructive ways of reducing the conditions that could negatively impact on nurses in order to maintain and improve their emotional exhaustion. Adverse conditions may include high workload, low job control, low collegial and managerial support, and low supervision and debriefing sessions (Hlengani, 2006). According to Danieli (1985) (as cited in Hlengani,

2006) palliative-care nurses could benefit from five coping strategies, namely, social support, task-focused behaviour, emotional distancing, cognitive self-talk, and a group approach to dealing with secondary traumatic stress, empathy and emotional exhaustion. These coping strategies are aimed at creating an environment that is safe enough, and where nurses will feel free to discuss their feelings, and any other problems they may encounter, that could be detrimental to them or to their patients.

5.4 Recommendations for future research

The first suggestion for possible future research is that this study be replicated on a larger population to increase generalisability of the results.

It is also suggested that future research adopt a longitudinal design, rather than the cross-sectional design that was employed in the current study. Implementation of a longitudinal design may provide greater and more comprehensive detail that will offer better insight and understanding.

In addition, a multi-method approach by using both quantitative and qualitative research methods is highly recommended. This too, should enable the intended researcher to gain a fuller understanding of the data gathered, and make an improved analysis (Welman & Kruger, 2001). According to Macritchie (2006) using both qualitative and quantitative research methods would account for the weaknesses of either methodology in isolation, and thus improve the overall research design and ensure greater reliability and validity of the data.

Although the current study has shed some light on key areas pertaining to secondary traumatic stress, the researcher feels that it is evident that more research is required to

fully understand and substantiate the essence of the construct, especially within the South African context.

With reference to Dutton and Rubinstein's (1995) model for secondary traumatic stress reaction for nurses who are working with traumatised patients, personal and environmental factors have been identified that may influence the development of secondary traumatic stress. Thus, future empirical research needs to substantiate these factors.

It would be beneficial to health management if better information were to be gained on how nurses, and patients in particular, find and perceive their experiences within the units so that rules, regulations and policies can be tailored to the specific needs of both nurses and their patients.

5.5 Conclusion

The health-care environment plays a critical role in the well-being of health-care personnel. This environment consists of a variety of factors that may either enhance or inhibit nurses' well-being, and thus influence service delivery and the quality of patient care they provide. The difference in emotional well-being of nurses who are working in different care contexts has had little attention in terms of research in the South African context and abroad. Evidence suggests that this area is worth researching, because of the assumption that exists among people who believe that, apart from the type of care that they provide, there are no differences between palliative-care and general-care nurses.

After testing for the differences between the two groups of nurses in terms of secondary traumatic stress, empathy, emotional exhaustion, affective and continuance commitment and sense of coherence, the study found that the groups of nurses were different in their levels of affective commitment. This may be ascribed to empathic relationships that palliative-care nurses form with their patients, which may further manifest into nurses having an emotional attachment to their organisation. Thus palliative nurses strongly identify with the goals of the organisation and their desire to remain part of it.

More research is needed to gain further knowledge on the nurses' working conditions, and factors that may positively or negatively influence their well-being. It is thus recommended that future research take into consideration the suggestions made in terms of the limitations and theoretical implications of this study. In conjunction with the research findings of this study, further research could be generated that might aim at improving the health-care system. Thus future research should aim at improving nurses' emotional and psychological well-being by minimising the development of secondary traumatic stress and emotional exhaustion, lessening the negative effects associated

with empathy and improving nurses' sense of coherence. These will further impact on the affective and continuance commitment levels of the nurses, and thus improve service delivery and the quality of patient care.

REFERENCES

- Allen D., & Marshall E. S. (2008). Children with HIV/AIDS: A vulnerable population with unique needs for palliative care. *Journal of Hospice and Palliative Nursing*, 10, 359-367.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organisation. *Journal of Occupational Psychology*, 63, 1-18
- Antonovsky, A. (1979). *Health, stress and coping*. San Francisco: Jossey-Bass, Inc. Publishers.
- Antonovsky, A. (1987). *Unravelling the mystery of health: How people manage stress and stay well*. San Francisco: Jossey-Bass, Inc. Publishers.
- Antonovsky, A., & Sagy, S. (1986). The development of a sense of coherence and its impact on response to stress situations. *Journal of Social Psychology*, 126, 213-225.
- Ashby, M. A., Kissane, D. W., Beadle, G. F. & Rodger, A. (1996). Psychosocial support, treatment of metastatic disease and palliative care. *The Medical Journal of Australia*, 164, 43-49.
- Barclay, H. (2007). *Participation in a community service programme has a positive effect on high school volunteers' empathy*. Unpublished MA Research Report, University of the Witwatersrand: Johannesburg.
- Barsade S. G. (2002). The ripple effect: Emotional contagion and its influence on group behaviour. *Administrative Science Quarterly*; 47, 644-675

- Beere, D. B., Pica, M. & Maurer, L. (1996). Social desirability and the dissociative experiences scale. *Dissociation*, 9, 130-133.
- Benbow, S. M. (1998). Burnout: Current knowledge and relevance to old age psychiatry. *International Journal of Geriatric Psychiatry*, 13, 520-526.
- Benoit, L. G., Veach, P. M. & LeRoy, B. S. (2007). When you care enough to do your very best: genetic counselor experiences of compassion fatigue. *Journal of Genetic Counseling*, 16, 219-312.
- Bergdahl, E., Wikström, B. M. & Andershed, B. (2007). Esthetic abilities: a way to describe abilities of expert nurses in palliative home care. *Journal of Clinical Nursing*, 16, 752–760.
- Bernstein, C. (1992). *Supervisor Social Support as a Moderator of Stress-Strain Relationships*. Unpublished MA Dissertation, University of the Witwatersrand, Johannesburg.
- Bride, B. E, Robinson, M. M, Yegidis, B. & Figley, C. R. (2003). Development and validation of the secondary traumatic stress scale. *Research on Social Work Practice*, 13, 1-16.
- Brown, B. (2003). *Employees' organizational commitment and their perception of supervisors' relations-oriented and task-oriented leadership behaviours*. Unpublished doctoral thesis. State University, Virginia.
- Brunero, S., Lamont, S. & Coates, M. (2010). A review of empathy education in nursing. *Nursing Inquiry*, 17, 64-73

- Brunnhuber, K., Nash, S., Meier, D. E., Weissman, D. E. & Woodcock, J. (2008). *Putting evidence into practice: Palliative care*. Minneapolis: BMJ Publishing Group.
- Campbell, L. M. (2011). Children's palliative care in South Africa: an urgent need for an evidence base. *The Southern African Journal of HIV Medicine*, 12, 12-13.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, 10, 85-104.
- Davis, M. H. (1983). Measuring individual differences in empathy: evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113- 126.
- DeCosta, J. (2004). *Data Analysis in SPSS*. Retrieved 14 February 2011 from <http://www.stat-help.com/notes.html>
- Demeari, E., Bakker, A. B., Nachreiner, F. & Schaufeli, W. B. (2000). A model of burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing*, 32, 454-464.
- Devilly, G. J., Wright, R. & Varker, T. (2009). Vicarious trauma, secondary traumatic stress or simply burnout? Effect of trauma therapy on mental health professionals. *Australian and New Zealand Journal of Psychiatry*, 43, 373-385.
- Dominguez-Gomez, E. & Rutledge, D. N. (2009). Prevalence of Secondary Traumatic Stress among Emergency Nurses. *Journal of Emergency Nursing*, 35, 199-204.
- Douglas, K. (2010). When caring stops, staffing doesn't really matter. *Nursing Economics*, 28, 415-419

- Dutton, M. A., & Rubinstein, F. L. (1995). Working with people with PTSD: Research Implications. In C. R. Figley (Ed.), *Compassion fatigue: coping with secondary traumatic stress disorder in those who treat the traumatised*. (pp. 82- 100). New York: Brunner/Mazel Publishers
- Else, J.R. (1990). *Discriminant validation of the three dimensions of burnout*. Unpublished Research Report, University of the Witwatersrand: Johannesburg
- Eriksson, M., Lindstrom, B. & Lilja, J. (2007). A sense of coherence and health. Salutogenesis in a societal context: Aland, a special case? *Journal of Epidemiology and Community Health*, 61, 684-688.
- Faulkner, A. (1998). ABC of palliative care: Communication with patients, families, and other professionals. *British Medical Journal*, 316, 130-132.
- Faull, C., Carter, Y. & Woof, R. (1998). *Handbook of palliative care*. USA: Blackwell Science, Inc.
- Feldt, T. & Rasku, A. (1998). The structure of Antonovsky's Orientation to Life Questionnaire. *Personality and Individual Differences*, 25, 505-516.
- Feldt, T. (1997). The role of sense of coherence in well-being at work: analysis of main and moderator effects. *Work & Stress*, 11, 134-147.
- Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: an overview. In C. R. Figley (Ed.), *Compassion Fatigue: Coping with Secondary Traumatic Stress Disorder in Those who treat the Traumatized*. (pp. 1- 20). New York: Brunner/Mazel Publishers.
- Fredrickson, B. L. (2000). Cultivating positive emotions to optimize health and well-being. *Prevention & Treatment*, 3, 1-12.

- Fredrickson, B. L. & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, 13, 172-175.
- Gallagher, T. J., Wagenfeld, M.O., Baro, F. & Haepers, K. (1994). Sense of coherence, coping and caregiver role overload. *Social Science and Medicine*, 39, 1615-1622.
- Geldenhuis, E. (2006). *Organisational responses to compassion fatigue and burnout in trauma counsellors: a multi-organisational investigation*. Unpublished MA research report, University of the Witwatersrand.
- Georges, J. J.; Grypdonck, M. & De Casterle, B. D. (2002). Being a palliative care nurse in an academic hospital: a qualitative study about nurses' perceptions of palliative care nursing. *Journal of Clinical Nursing*, 11, 785–793.
- Harinarian, E. (2007). *Compassion fatigue, level of exposure, empathy and affect intensity amongst employee assistance programme counsellors*. Unpublished MA research report. University of the Witwatersrand, Johannesburg.
- Hart, K. E.; Hittner, J. B. & Paras, K. C. (1991). Sense of coherence, trait anxiety, and the perceived availability of social support. *Journal of Research in Personality*, 25, 137-145.
- Hatfield, E., Cacioppo, J. L. & Rapson, R. L. (1993). Emotional contagion. *Current Directions in Psychological Sciences*, 2, 96-99.
- Hlengani, L. D. (2006). *The relationship between work environment, sense of coherence and compassion fatigue amongst employee assistance programme (EAP) practitioners*. Unpublished MA research report, University of the Witwatersrand, Johannesburg.

- Howell, D. C. (2004). *Fundamental statistics for the behavioural sciences*, (5th ed.). New York, U.S.A: Thomson Brooks/Cole.
- Iacovdes, A., Fountoulakis, K., Moysidou, C. & Ierodiakonou, C. (1997). Burnout in Nursing Staff: A Clinical Syndrome rather than a Psychological Reaction. *General Hospital Psychiatry*, 19, 419-428.
- Janoff-Bullman, R. (1985). The aftermath of victimization. Rebuilding shattered assumptions. In C. Figley (Ed.), *Trauma and its wake: The study and Treatment of Post-Traumatic Stress Disorder*. New York: Brunner/Mazel.
- Johns, G. & Saks, A. M. (2005). *Organizational Behaviour: Understanding and Managing Life at Work*, 6th ed. Pearson Prentice Hall, Toronto.
- Johnson, R. E. & Chang, C. (2006). "I" is to continuance as "We" is to affective: the relevance of the self-concept for organizational commitment. *Journal of Organizational Behaviour*, 27, 549-570.
- Kleber, R. J., & Brom, D. (1992). *Coping with trauma: theory, prevention and treatment*. Amsterdam: Swets & Zietlinger B.V.
- Kunyk, D.K. & Olson, J.K. (2001). Clarification of conceptualizations of empathy. *Journal of Advanced Nursing*, 35, 317-325.
- Lok, P. & Crawford, J. (2001). Antecedents of organizational commitment and the mediating role of job satisfaction. *Journal of Managerial Psychology*, 16, 594-613.
- Luthans, F. (2002). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive*, 16, 57-72.

- Luthans, F.; Luthans, K. W. & Luthans, B. C. (2004). Positive psychological capital: Beyond human and social capital. *Business Horizons*, 47, 45-50.
- MacRitchie, V. & Leibowitz, S. (2010). Secondary traumatic stress, level of exposure, empathy and social support in trauma workers. *South African Journal of Psychology*, 40, 149-158.
- Macritchie, V. J. (2006). *Secondary traumatic stress, level of exposure, empathy and social support in trauma workers*. Unpublished MA research report, University of the Witwatersrand, Johannesburg.
- Mahtani-Chugani, V., Gonzalez-Castro, I., Saenz de Ormijana-Hernandez, A., Martin-Fernandez, R. & Fernandez de la Vega, E. (2010). How to provide care for patients suffering from terminal non-oncological diseases: barriers to palliative care approach. *Journal of Palliative Medicine*, 24, 787-795.
- Martin, A. J. (2005). The role of positive psychology in enhancing satisfaction, motivation, and productivity in the workplace. *Journal of Organizational Behavior Management*, 24, 113- 133.
- Maslach, C. & Goldberg, J. (1998). Prevention of Burnout: New Perspectives. *Applied and Preventive Psychology*, 7, 63-74.
- Maslach, C., Jackson, S. E. & Leiter, M. P. (1997). Maslach Burnout Inventory. In C.P. Zalaquett & R.J. Wood (Eds), *Evaluating Stress: A book of Resources*. London: The Scarecrow Press Inc.
- Maytum, J. C.; Heiman, M. B. & Garwick, A. W. (2004). Compassion fatigue and burnout in nurses who work with children with chronic conditions and their families. *Journal of Pediatric Health Care*, 18, 171-179.

- McCann, I. L. & Pearlman, L. A. (1990). *Psychological trauma and the adult survivor*. New York: Brunner/Mazel.
- McCann, I. L. & Pearlman, L. A. (1992). Constructivist self-development theory: a theoretical framework for assessing and treating traumatized college students. *Journal of American College Health, 40*, 189-196.
- McSherry, W. C. & Holm, J. E. (1994) Sense of Coherence: its effects on psychological and physiological process prior to, during, and after a stressful situation. *Journal of Clinical Psychology, 50*, 477-487.
- Meyer, J. P. & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*, 61-89.
- Meyer, J.P. & Allen, N.J. (1997). *Commitment in the workplace: Theory, research and application*. Thousand Oaks, CA: Sage.
- Milner, K., Haskell, C. & Thatcher, A. (2002). The relationship between intention to emigrate and organisation commitment. *South African Journal of Psychology, 32*, 16-20.
- Muller, Y. & Rothmann, S. (2009). Sense of coherence and employees' perceptions of helping and restraining factors in an organisation. *SA Journal of Industrial Psychology, 35*, 89-98.
- Muthuveloo, R. & Rose, R. C. (2005). Typology of organisational commitment. *American Journal of Applied Science, 2*, 1078-1081.
- Nene, N. (2005). *Compassion fatigue and the sense of coherence in caregivers working with sexually abused children in Soweto*. Unpublished MA research report, University of the Witwatersrand, Johannesburg.

- Parker, D. & Hodgkinson B. (2011). A comparison of palliative care outcome measures used to assess the quality of palliative care provided in long-term care facilities: a systematic review. *Palliative Medicine*, 25, 5–20.
- Pearlman, L. A. & Saakvitne, K. W. (1995) Treating therapists with vicarious traumatization and secondary traumatic stress disorder. In C.R. Figley (Ed) *Compassion Fatigue: Coping with Secondary Traumatic stress Disorder in those who treat the traumatised*. New York: Brunner/Mazel.
- Penrod, J. D., Deb, P., Dellenbaugh, C. Burgess, J. F., Zhu, C. W., Christiansen, C. L., Luhrs, C. A., Cortex, T., Livote, E. Allen, V. & Morrison, R. S. (2010). Hospital-based palliative care consultation: effects on hospital cost. *Journal of Palliative Medicine*, 13, 973-979.
- Ponte, P. R.; Hanley, D., Kruger, N., Conlin, G. & DeMarco, R. (2004). Reshaping the practice environment: the importance of coherence. *Journal of Nursing Administration*, 34, 173–179.
- Raiziene, S. & Endriulaitiene, A. (2007). The relations among empathy, occupational commitment, and emotional exhaustion of nurses. *Medicina*, 43, 425-431.
- Regehr, C.; Goldberg, G. & Hughes, J. (2002). Exposure to human tragedy empathy and trauma in ambulance paramedics. *American Journal of Orthopsychiatry*, 72, 505-513.
- Rosenthal, R., & Rosnow, R. L. (1991). *Essentials of Behavioural Research: Methods and Data Analysis* (2nd ed.). Boston: McGraw-Hill.
- Sangweni, B. (2008). *The relationship between Burnout and Job Satisfaction among Registered Nurses at a Hospital in Johannesburg*. Unpublished MSc research report, University of the Witwatersrand, Johannesburg.

Santos, J.R.A. (1999). Cronbach's Alpha: A Tool for Assessing the Reliability of Scales. *Journal of extension*, 37.

Schaufeli, W. B. & Peeters, M. C. W. (2000). Job Stress and Burnout among Correctional Officers: a Literature Review. *International Journal of Stress Management*, 7, 19-48.

Selecky, P. A.; Eliasson, C. A. H.; Hall, R. I.; Schneider, R. F.; Varkey, B. & McCaffree, D. R. (2005). Palliative and End-of-Life Care for Patients with Cardiopulmonary Diseases: American College of Chest Physicians Position Statement. *Journal of the American College of Chest Physicians*, 128, 3599-3610.

Simoens, S., Kутten, B. Keirse, E., Vaned Berghe, P., Beguin, C. Desmedt, M., Deveugele, M., Le'onard, C., Paulus, D. & Menten, J. (2010). Costs of Terminal Patients who Receive Palliative Care or Usual Care in Different Hospital Wards. *Journal of Palliative Medicine*, 13, 1365-1369.

Singer, L. A. (2002). *Career Salience as a Moderator of the Relationship between Management's Support for Career Development and Subordinates Organisational Commitment*. Unpublished research report, University of the Witwatersrand, Johannesburg.

Stewart-Sicking, J. A. (2009). Emotional Well-Being: Finding joy that is complete. In Craddock, W.S. *All shall be well: An approach to wellness*. Church Publishing Incorporated: New York.

Twycross, R. (1999). *Introducing Palliative Care* (3rd ed.). UK: Radcliffe Medical Press Ltd.

Twycross, R. (2005). *Introducing Palliative Care* (4th ed.). UK: Radcliffe Medical Press Ltd

- Van den Berg, H., Bester, C., Janse van Rensburg-Bonthuyzen. E., Engelbrecht, M., Hlophe, H., Summerton, J., Smit, J., Du Plooy, S. & Van Rensburg, D. (2006). *Burnout and compassion fatigue in professional nurses: A study in PHC facilities in the Free State, with special reference to the antiretroviral treatment program*. Centre for Health Systems Research and Development: Bloemfontein, S.A.
- Van der Colff, J. J. & Rothmann, S. (2009). Occupational Stress, Sense of Coherence, Coping, Burnout and Work Engagement of Registered Nurses in South Africa. *SA Journal of Industrial Psychology*, 35, 1-10.
- Viljoen, J. P. & Rothmann, S. (2009). Occupational stress, ill health and organisational commitment of employees at a university of technology. *SA Journal of Industrial Psychology*, 35, 67-77.
- Ward, J.; Schaal, M.; Sullivan, J.; Bowen, M. E.; Erdmann, J. B. & Hojat, M. (2009). Reliability and validity of the Jefferson Scale of empathy in undergraduate nursing students. *Journal of Nursing Measurement*, 17, 73-89.
- Webster, D. (2010). Promoting empathy through a creative reflective teaching strategy: A mixed-method study. *Journal of Nursing Education*, 49, 87-95.
- Welman, J. C., & Kruger, S. J. (2001). *Research Methodology* (2nd ed.). Cape Town: Oxford University Press.
- Whitley, B.E. (2002). *Principles of research in behavioural science*. New York: McGraw-Hill.
- Wright, T. A. (2003). Positive organizational behaviour: An idea whose time has truly come. *Journal of Organizational Behaviour*, 24, 437-442.

Wright, T. A. & Cropanzano, R. (2004). The role of psychological well-being in job performance: a fresh look at an age-old quest. *Organizational Dynamics*, 33, 338–351.

Yew, L. T. (2008). Job satisfaction and affective commitment: a study of employees in the tourism industry in Sarawak, Malaysia. *Sunway University College Academic Journal*, 4, 27-43

APPENDICES

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Miss Katleho N Mokgotla

CLEARANCE CERTIFICATE

M10560

PROJECT

The Emotional Well-Being of Palliative Care Nurses Working in a Referral Hospital in Johannesburg

INVESTIGATORS

Miss Katleho N Mokgotla.

DEPARTMENT

Psychology Department

DATE CONSIDERED


28/05/2010

DECISION OF THE COMMITTEE*

Approved unconditionally

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 31/05/2010

CHAIRPERSON .....
(Professor PE Cleaton-Jones)

*Guidelines for written 'informed consent' attached where applicable

cc: Supervisor : Dr C Gwandure

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES...



Private Bag X39, Johannesburg 2000, South Africa
Tel: +27 (0) 11 488 4911, Fax: +27 (0) 11 643 1612
www.johannesburghospital.org



Office of the CEO
Enquiries: M. Motjelele
(011): 488-3793
(011) 488-3753
18 August 2010

Katlego Mokgotla
Industrial Psychology Masters Student
University of the Witwatersrand

Dear Ms. Mokgotla

RE: "Permission to conduct a research study in the emotional well being of palliative care nurses working in a referral hospital in Johannesburg"

Permission is granted for you to conduct the above research as described in your request provided:

1. Charlotte Maxeke Johannesburg Academic hospital will not in anyway incur or inherit costs as a result of the said study.
2. Your study shall not disrupt services at the study sites.
3. Strict confidentiality shall be observed at all times.
4. Informed consent shall be solicited from patients participating in your study.

Please liaise with the Head of Department and Unit Manager or Sister in Charge to agree on the dates and time that would suit all parties.

Kindly forward the results of your study to the CEO's office on completion of the research.

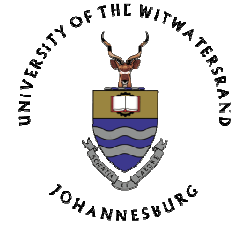
Yours sincerely

Dr. Barney Selebano
Chief Executive Officer

Appendix C: Participant Information Sheet



School of Human & Community Development
University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559



November 2010

Participant Information Sheet for Hospital Participants (Questionnaire Based Research)

Good Day

My name is Katleho Mokgotla and I am currently conducting a research study for the purposes of obtaining my Masters Degree in Industrial Psychology at the University of the Witwatersrand. My research focuses on palliative care and general care nurses, and whether there is a difference in their emotional well-being

The purpose of the study is to determine the differences in palliative care and general care nurses in terms of variables such as, Secondary Traumatic Stress, Emotional Exhaustion, Empathy, Affective and Continuance Commitment, and Sense of Coherence. I would therefore like to invite you to participate in this research study to investigate the emotional wellbeing of nurses in the South African context.

You are invited to participate in this study. Participation in this research will involve completing the attached questionnaire. It should take approximately 20 minutes to complete. Participation in this study is completely voluntary. You will not be advantaged or disadvantaged in any way should you choose to complete the questionnaire or not. Furthermore, whilst some questions are asked about your personal circumstances, no identifying information such as your name or ID number is required of you, and as such you will remain anonymous. This research is not intended to investigate any individuals, but rather to establish general understandings of wellbeing amongst nurses. Your completed questionnaire will not be seen by anyone but myself and responses will be kept confidential.

If you are willing to participate, please complete the attached questionnaire as honestly and carefully as possible. Completion of the questionnaire is regarded as consent to participate in the study. Once you have completed the questionnaire, please place it in the envelope provided. In doing so, no one can read through your completed questionnaire but me. Feedback will be made available, by myself, for any participant who requests it.

Your participation in this study will be greatly appreciated.

Should you have any queries, please do not hesitate to contact either myself, or my supervisor, Calvin Gwandure..

Yours Sincerely,

Katleho Mokgotla
Industrial Psychology Masters student
072 325 9931

Dr. Calvin Gwandure
Supervisor
011 717 4503

Appendix D: Biographical Questionnaire

GENDER

Please place a cross (X) where appropriate

Male	
Female	

AGE

Please place a cross (X) where appropriate

30 years and under	
31 years – 40 years	
41 years – 50 years	
51 years and over	

TENURE

(Number of years in your profession)

Please a cross (X) where appropriate

5 years and less	
6 years – 15 years	
16 years – 25 years	
More than 25 years	

HOURS WORKED PER WEEK

Please a cross (X) where appropriate

Less than 30 hours	
30 hours to 40 hours	
40 hours to 50 hours	
More than 50 hours	

Appendix E: SECONDARY TRAUMATIC STRESS SCALE

The following is a list of statements made by persons who have been impacted by their work with traumatized clients. Read each statement, and then indicate how frequently the statement was true for you in the past *seven (7) days* by circling the corresponding number next to the statement.

	NEVER (1)	RARELY (2)	OCCASIONALLY (3)	OFTEN (4)	VERY OFTEN (5)
1. I felt emotionally numb					
2. My heart started pounding when I thought about my work with clients					
3. It seemed as if I was reliving the trauma(s) experienced by my client(s)					
4. I had trouble sleeping					
5. I felt discouraged about the future					
6. Reminders of my work with clients upset me					
7. I had little interest in being around others					

	NEVER (1)	RARELY (2)	OCCASIONALLY (3)	OFTEN (4)	VERY OFTEN (5)
8. I felt jumpy					
9. I was less active than usual					
10. I thought about my work with clients when I didn't intend to					
11. I had trouble concentrating					
12. I avoided people, places, or things that reminded me of my work with clients					
13. I had disturbing dreams about my work with clients					
14. I wanted to avoid working with some clients					
15. I was easily annoyed					
16. I expected something bad to happen					
17. I noticed gaps in my memory about client sessions					

NOTE: "Client" is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, and so forth.

Appendix F: Interpersonal Reactivity Index (IRI)

The following statements enquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate number on the scale at the top of the page: 1, 2, 3, 4, or 5. When you have decided on your answer, make an **X** in the appropriate box next to the item number. Answer as honestly as you can.

ANSWER SCALE:

1	2	3	4	5
DOES NOT DESCRIBE ME WELL				DESCRIBES ME VERY WELL

Statements	Statements describes me				
	1 Not Well	2 Some what	3 Average	4 Well	5 Very Well
1. I daydream and fantasize, with some regularity, about things that might happen to me					
2. I often have tender, concerned feelings for people less fortunate than me					
3. I sometimes find it difficult to see things from the "other guy's" point of view					
4. Sometimes I don't feel very sorry for other people when they are having problems					
5. I really get involved with the feelings of the characters in a novel					
6. In emergency situations, I feel apprehensive and ill-at-ease					
7. I am usually objective when I watch a movie or play, and I don't often get completely caught up in it					
8. I try to look at everybody's side of a disagreement before I make a decision					
9. When I see someone being taken advantage of, I feel kind of protective towards them					
10. I sometimes feel helpless when I am in the middle of a very emotional situation					
11. I sometimes try to understand my friends better by imagining how things look from their perspective					

Statements	Statements describes me				
	1 Not Well	2 Some what	3 Average	4 Well	5 Very Well
12. Becoming extremely involved in a good book or movie is somewhat rare for me					
13. When I see someone get hurt, I tend to remain cal					
14. Other people's misfortunes do not usually disturb me a great deal					
15. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments					
16. After seeing a play or movie, I have felt as though I were one of the characters					
17. Being in a tense emotional situation scares me					
18. When I see someone being treated unfairly, I sometimes don't feel very much pity for them					
19. I am usually pretty effective in dealing with emergencies					
20. I am often quite touched by things that I see happen					
21. I believe that there are two sides to every question and try to look at them both					
22. I would describe myself as a pretty soft-hearted person					
23. When I watch a good movie, I can very easily put myself in the place of a leading character					
24. I tend to lose control during emergencies					
25. When I'm upset at someone, I usually try to "put myself in his shoes" for a while					
26. When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me					
27. When I see someone who badly needs help in an emergency, I go to pieces					
28. Before criticizing somebody, I try to imagine how I would feel if I were in their place					

Appendix G: Maslach Burnout Inventory (Emotional Exhaustion)

The following page contains 9 statements of job related feelings. Please read each statement carefully and decide if you feel this way about your job. If you have never had this feeling, place an X in the never “0” column. If you have had this feeling, indicate how often you feel it, by placing an X in the appropriate column (“1” – “6”).

Example.

E.g. I feel angry. If you feel angry at least a few times a week, place a cross in column 5.

	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
How Often	0	1	2	3	4	5	6
E.g. I feel angry						X	

	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
HOW OFTEN:	0	1	2	3	4	5	6
1. I feel emotionally drained from my work							
2. I feel used up at the end of the workday							
3. I feel fatigued when I get up in the morning and have to face another day on the job							
4. Working with people all day is really a strain for me							
5. I feel burned out from my work							
6. I feel frustrated by my job							
7. I feel I'm working too hard on my job							
8. Working with people directly puts too much stress on me							
9. I feel like I'm at the end of my rope							

Appendix H: Affective Commitment Scale

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
1. I would be very happy to spend the rest of my career with this organization					
2. I enjoy discussing my organization with people outside it					
3. I really feel as if this organization's problems are my own					
4. I think that I could easily become as attached to another organization as I am to this one					
5. I do not feel like 'part of the family' at my organization					
6. I do not feel 'emotionally attached' to this organization					
7. This organization has a great deal of personal meaning for me					
8. I do not feel a strong sense of belonging to my organization					

Appendix I: Continuance Commitment Scale

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
1. I am not afraid of what might happen if I quit my job without having another one lined up					
2. It would be very hard for me to leave my organization right now, even if I wanted to					
3. Too much in my life would be disrupted if I decided I wanted to leave my organization now					
4. It wouldn't be too costly for me to leave my organization now					
5. Right now, staying with my organization is a matter of necessity as much as desire					
6. I feel that I have too few options to consider leaving this organization					
7. One of the few serious consequences of leaving this organization would be the scarcity of available alternatives					
8. One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice — another organization may not match the overall benefits I have here					

Appendix J: ORIENTATION TO LIFE QUESTIONNAIRE

Here is a series of questions relating to various aspects of our lives. Each question has 7 possible answers. Please mark the number which expresses your answer, with numbers 1 and 7 being the extreme answers.

1. Do you have feelings that you don't really care about what goes on around you?

Very Seldom (1)	2	3	4	5	6	Very Often (7)
--------------------	---	---	---	---	---	-------------------

2. Has it happened in the past that you were surprised by the behaviour of people whom you thought you knew well?

Never Happened (1)	2	3	4	5	6	Always Happened (7)
-----------------------	---	---	---	---	---	---------------------------

3. Has it happened that people whom you counted on disappointed you?

Never Happened (1)	2	3	4	5	6	Always Happened (7)
-----------------------	---	---	---	---	---	---------------------------

4. Until now your life has had:

No clear goals or purpose at all (1)	2	3	4	5	6	Very clear goals and purpose (7)
--	---	---	---	---	---	--

5. Do you have the feeling that you're being treated unfairly?

Very Often (1)	2	3	4	5	6	Very Seldom (7)
----------------	---	---	---	---	---	--------------------

6. Do you have the feeling that you are in an unfamiliar situation and don't know what to do?

Very Often (1)	2	3	4	5	6	Very Seldom or never (7)
----------------	---	---	---	---	---	--------------------------------

7. Doing the things you do every day is:

A source of deep pleasure and satisfaction (1)	2	3	4	5	6	A source of pain and boredom (7)
---	---	---	---	---	---	---

8. Do you have very mixed-up feelings and ideas?

Very Often (1)	2	3	4	5	6	Very Seldom or never (7)
----------------	---	---	---	---	---	--------------------------------

9. Does it happen that you have feelings inside you would rather not feel?

Very Often (1)	2	3	4	5	6	Very Seldom or never (7)
----------------	---	---	---	---	---	--------------------------

10. Many people - even those with a strong character - sometimes feel like sad sacks (losers) in certain situations. How often have you felt this way in the past?

Never (1)	2	3	4	5	6	Very Often (7)
-----------	---	---	---	---	---	----------------

11. When something happened, have you generally found that:

You overestimated or underestimated its importance (1)	2	3	4	5	6	You saw things in the right proportion (7)
--	---	---	---	---	---	--

12. How often do you have the feeling that there's little meaning in the things you do in your daily life?

Very Often (1)	2	3	4	5	6	Very Often or never (7)
----------------	---	---	---	---	---	-------------------------

13. How often do you have feelings that you're not sure you can keep under control?

Very Often (1)	2	3	4	5	6	Very Seldom or never (7)
----------------	---	---	---	---	---	--------------------------

Thank you for your time and participation 😊