

TOTAL KNEE REPLACEMENT PATIENTS' EXPERIENCES OF A BRIEF HOPE-BASED IN-HOSPITAL INTERVENTION

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by

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Submitted in partial fulfilment of the requirements for the degree

PHILOSOPHIAE DOCTOR (Educational Psychology)

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PRETORIA 31 MARCH 2016



(in no specific order)

- To all the participants in this study for your unselfish involvement through sharing your experiences.
- To the surgical practice for allowing me access to your patients and for teaching me so much about the need for holistic patient care.
- To the hospital board that made it possible to work in the hospital.
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- To all my friends for standing by me.
- Soli Deo Gloria!

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The author, whose name appears on the title page of this thesis, has obtained, for the research described in this work, the applicable research approval. The author declares that he has observed the ethical requirements in terms of the University of Pretoria's Code of ethics for researchers and the Policy guidelines for responsible research.

Alfred Haupt du Plessis March 2016

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Ethics Clearance Certificate



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"I, Alfred H. du Plessis (91376450/04315456) declares that this thesis titled:

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which I hereby submit for the degree Philosophiae Doctor in Educational Psychology at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution."

Alfred Haupt du Plessis

Signed on the _____ day of _____ 2016, Pretoria, South Africa.

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Declaration of Language Editor

14 April 2016

TO WHOM IT MAY CONCERN (DECLARATION OF EDITING)

Mr. Alfred du Plessis' thesis, **TOTAL KNEE REPLACEMENT PATIENTS' EXPERIENCES OF A BRIEF HOPE-BASED IN-HOSPITAL INTERVENTION**, was language-edited by me in the period September 2015 to April 2016. It is the responsibility of the author to accept or reject my suggested changes.

Tw Steward

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The issue addressed by this study is the lack of individual in-hospital hope-based brief interventions for TKR patients, based on the integrative hope theory of Scioli et al. (2011). This descriptive-exploratory qualitative case study described the development of I-HOPE based on the theoretical framework of Scioli et al. (2011). It also explored and described I-HOPE in the unique context of TKR through the experiences of the 12 participants. The purposefully selected participants (n=12, male=6, female=6), aged between 50 and 80, were scheduled to undergo TKR surgery by an orthopaedic practice in a private hospital in Pretoria. The intervention took place between 1 August 2014 and 31 December 2014.

Data were collected using participant diaries, semistructured interviews, and a minifocus group interview. The study was able to confirm the application value of Scioli et al.'s (2011) hope theory as well as its compatibility with existing psychological and nursing hope intervention techniques and activities for TKR patients. Based on the study's interpretive paradigm, the exploratory findings confirmed the acceptability of the intervention in meeting the TKR participants' needs. The study also indicated additional participant needs during TKR not met by I-HOPE in its current form. Lastly, it was able to confirm the value of I-HOPE in conveying fundamental hope to the 12 TKR participants and in providing detailed insight into the lived experiences of these participants.

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KEY WORDS

- Attachment
- Hope
- Hopelessness
- Hope-based intervention
- Mastery

- Positive psychology
- Spirituality
- Survival
- Total knee replacement
- Very brief intervention

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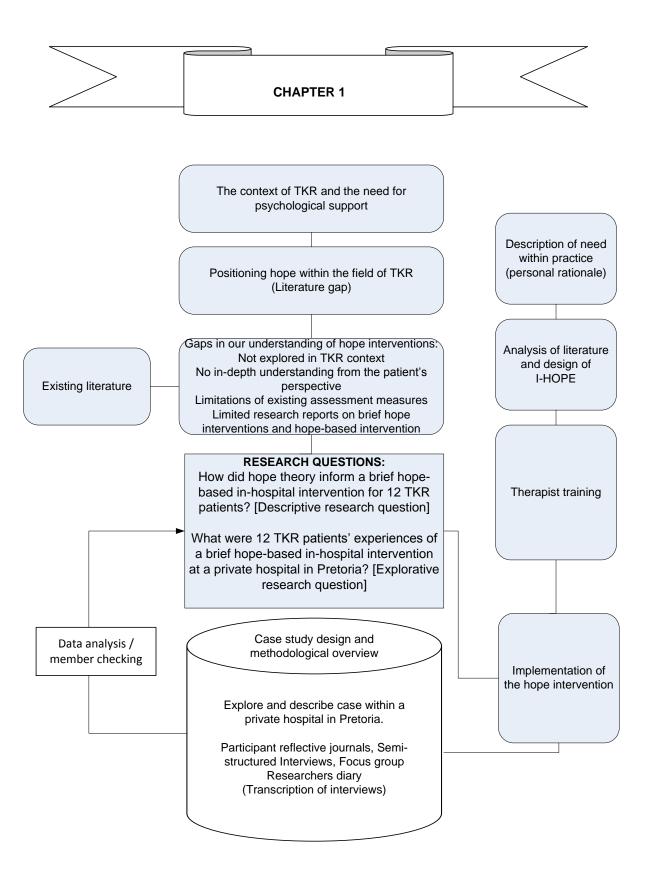


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1.1 INTRODUCTION

In developing countries such as South Africa, osteoarthritis as a chronic musculoskeletal disease is rated among the ten most disabling diseases with symptoms occurring in 10% of men and 18% of women aged 60 years and older (OECD, 2011). Total knee replacement (TKR) surgery, as one of the arthroplasty (joint replacement) surgical procedures, is considered an established and effective treatment of knee osteoarthritis (Woolhead, Donovan, & Dieppe, 2005). Following technological advances in TKR prosthetics, the use of this procedure has increased dramatically both locally and internationally over the past few decades (Muller, 2008; Spirakis, Learmonth, & Maver, 1993).

TKR is associated with improvement in physical health and long-term pain relief, yet it remains a major surgical procedure that can also be marked by severe physical pain, psychological distress, and even trauma (Buvanendran et al., 2010; Lamacraft, 2012; Salmon, & Hall, 2001; Schug, & Pogatzki-Zahn, 2011). Psychological distress during and following TKR surgery is often characterised by increased levels of anxiety, post-surgical depression, and emotional fatigue in the wake of the TKR recovery process, which places a high demand on the emotional coping of the patient (Salmon, & Hall, 2001; Salmon, Hall, & Peerbhoy, 2001; Thomas, & Sethares, 2010). From a psychotherapeutic perspective, such anxiety and depression-related symptoms have been likened to "loss of hope" (O'Hara, 2013, p. 77).

Psychological factors are known to influence the outcome of TKR surgery, affecting the quality of recovery and consequently the length of in-hospital stay (Brull, McCartney, & Chan, 2002; Fisher, Dierckman, Watts, & Davis, 2007). Some studies even claim that patients' pre-operative psychological state directly influences their physical recovery after arthroplasty (Salmon et al., 2001; Siggeirsdottir et al., 2005).

Complementary, nonpharmacological interventions such as playing relaxing music to patients (McCaffery, & Locsin, 2006; McRee, Noble, & Pasvogel, 2003), employing



massaging techniques (Büyükyılmaz, & Aştı, 2013), using guided imagery for relaxation (Thomas, & Sethares, 2010), and providing pre-operative education (Daltroy, Morlino, Eaton, Poss, & Liang, 1998; McDonald, Hetrick, & Green, 2004) have been used increasingly in the past two decades to counter the psychological distress associated with TKR, with varying and often contradicting results (Barnes, Bloom, & Nahin, 2008; Daltroy et al., 1998; Finan, Zautra, & Tennen, 2008; Lim, Yobas, & Chen, 2014; McDonald et al., 2004; Pellino et al., 2005; Seers, Crichton, Tutton, Smith, & Saunders, 2008; Tang, & Gibson, 2005; Thomas, & Sethares, 2010). These "symptom-focused" interventions have been aimed primarily at addressing the negative consequences of TKR surgery such as pain and anxiety (Barnes et al., 2008; Pellino et al., 2005; Seers et al., 2008; Thomas, & Sethares, 2010).

In contrast to the abovementioned interventions, developments in the field of positive psychology have informed intervention practice by shifting the focus from the negative consequences of medical conditions to promoting the concept of wellness (Duckworth, Steen, & Seligman, 2005; Seligman, Rashid, & Parks, 2006). Interventions based on positive psychological constructs endeavour to foster positive emotions in patients while at the same time seeking to understand how building on strengths and virtues can influence both physical health and subjective wellbeing (Gable, & Haidt, 2005).

Hope is seen as such a positive future-oriented cognitive construct and emotion (Seligman, 2002; Snyder, 2000c). Extensive research on hope has shown hope to be essential in helping patients cope with conditions such as spinal cord injuries (Lohne, 2008; Lohne, & Severinsson, 2006), myocardial infarction (Eriksson, Asplund, Hochwälder, & Svedlund, 2013), chronic pain (Howell, Jacobson, & Larsen, 2014), cystic fibrosis (Anbar, & Murthy, 2010), dysphoria (Chang, & DeSimone, 2001), and, perhaps most prominently, in cancer treatment and palliative care (Barilan, 2012; Buckley, & Herth, 2004; Herth, 2000, 2001). A recent oncology survey revealed that hope was the most significant factor impacting on patient mortality (Cousins, 1989 in Scioli, Scioli-Salter, Sykes, Anderson, & Fedele, 2015).

Research evidence suggests that higher levels of hope in patients who undergo medical interventions lead to positive adjustment, better management of psychological stress and pain, and increased motivation for recovery and healing (Berg, Snyder, & Hamilton, 2008; Lohne, & Severinsson, 2006; Snyder, Rand, & Sigmon, 2002;



Wonghongkul, Moore, Musil, Schneider, & Deimling, 2000). More specifically, in the field of TKR, research aimed at determining levels of hope prior to arthroplasty indicated that high hope could predict positive emotional adjustment before and after surgery and that raising hope levels in TKR patients could promote patient recovery (Hartley, Vance, Elliott, Cuckler, & Berry, 2008; Taylor, 2011). Based on these studies, the use of hope-based interventions as part of complementary nonpharmacologic intervention during TKR can have definite benefits for patients (Anbar, & Murthy, 2010).

Hope-based interventions refer to implicit and/or explicit psychological interventions based on hope theory aimed at positively impacting the individual's level of hope (Larsen, Edey, & Lemay, 2007). Both these types of interventions can be used singly or in combination to increase patient hope during therapy (Larsen et al., 2007). Implicit interventions are interventions where reference is not made explicitly to the word "hope" during the intervention – the focus is more on fostering a hopeful therapeutic relationship and in assisting the patient to change to a hopeful frame of mind (Larsen, & Stege, 2010a). Explicit hope-focused interventions are often psychoeducational in nature, address multiple dimensions of hope, and reframe threats to hope (Larsen, & Stege, 2010b).

Hope-based interventions are based on various theoretical understandings of hope (Anbar, & Murthy, 2010; Cheavens, Feldman, Gum, Michael, & Snyder, 2006; Yancey, Greger, & Coburn, 1994) that can be classified broadly under (a) hope that is based on Snyder's cognitive goal-directed theory (unidimensional), and (b) hope that is based on various multidimensional theories and models, in the field of nursing, that make provision for affective, affiliative, and other contextual influences on hope (Dufault, & Martocchio, 1985; Herth, & Cutcliff, 2002a, 2002b, 2002c; Snyder, 1994, 2000b; Stephenson, 1991).

Snyder's (1994) unidimensional hope theory is the theory most often used in psychology. Various studies have reported on the use of this theory in conceptualising hope interventions based on an integration of existing psychotherapeutic approaches that include cognitive-behavioural and solution-focused therapies to form a hope-based intervention in the treatment of cancer patients (Ho et al., 2012; Kashani et al., 2014; Michael, Taylor, & Cheavens, 2000; Snyder et al., 2000; Snyder, & Taylor,



2000; Taylor, 2000; Taylor, Feldman, Saunders, & Ilardi, 2000). However, the theory has been criticised for not addressing the affiliative and contextual dimensions of hope, which are key to a multidimensional understanding of hope in a medical context (Dufault, & Martocchio, 1985; Herth, 2000, 2001). The unidimensional hope theory furthermore upholds individualism as opposed to collectivism in explaining how hope develops in an individual (Bernardo, 2010).

Hope-based multidimensional interventions are used primarily in oncology and palliative care (Duggleby et al., 2007; Herth, 2000, 2001; Kim, Shin, Park, Park, & Kim, 2008; Rustøen, Cooper, & Miaskowski, 2011; Shin, & Park, 2007). Examples of such interventions are the "Learning to Live with Cancer" programme, the "Hope Intervention" programme (HIP), the "Living with Hope" programme, and the "HOPE-IN" programme (Duggleby et al., 2007; Herth, 2000, 2001; Rustøen et al., 2011; Rustøen, Wiklund, Hanestad, & Moum, 1998). Although multidimensional interventions incorporate the unidimensional perspective on hope (Weis, & Speridakos, 2011), they are sometimes criticised for not addressing attachment, mastery, survival, and spirituality (Scioli, Ricci, Nyugen, & Scioli, 2011). Scioli et al. (2011) see these four factors as the outline for developing effective hope-based interventions. Not only do they incorporate the major hope research ideas of psychology, philosophy, and medicine but also a psychological understanding of psychiatric conditions (Scioli et al., 2011).

A review of the literature on hope-based interventions highlighted the following research hiatuses: All the reviewed studies reported on hope-based interventions in group formats with no reporting on individual interventions (Cheavens, Feldman, Gum, et al., 2006; Herth, 2000, 2001; Rustøen, Cooper, & Miaskowski, 2010). Furthermore, most of the interventions were not brief (as defined in this study) but, rather, were administered to patients over five to eight weeks on an out-patient basis (Herth, 2000; Rustøen et al., 2011). With the exception of Duggleby et al. (2007), who gave patients activities to complete in their own time over a period of a week, shorter interventions of four or fewer sessions to instil hope were reported only in non-medical contexts (Berg et al., 2008; Feldman, & Dreher, 2012). Hope-based medical interventions were also generally carried out by psychiatric nurses as members of a multidiscipinary team (Duggleby et al., 2007; Herth, 2000, 2001).



In addition, research studies reporting on hope interventions were quantitative in nature where patient rating scales were used to report on the effect of hope interventions on patients' hope. Some studies included questionnaires on patients' perceptions of the interventions (Herth, 2001; Rustøen et al., 2011) with few using interviews to explore patient experiences (Duggleby et al., 2007; Moore, Hall, & Jackson, 2014). Woolhead et al. (2005) point out that the problem with rating scales is that they are based on researchers' conceptual understanding of the measured phenomena and assume that patients have the same understanding. Those receiving the health care should be given a voice rather than just professionals making judgements on the quality of interventions (Black, & Jenkinson, 2009). Furthermore, from a psychological point of view, the quantitative hope rating scales used in the assessment of the interventions did not include the components of attachment, mastery, survival, and spirituality as pointed out by Scioli et al. (2011). Finally, none of the hope-based interventions focused specifically on TKR.

This study endeavoured to address these research hiatuses by describing a brief hope-based in-hospital intervention (I-HOPE¹). It thus moved away from the existing unidimensional and multidimensional conceptualisations of hope intervention towards an integrative approach (Scioli et al., 2011). This was done by conceptualising I-HOPE based on Scioli et al.'s (2011) four-channelled system of hope (attachment, mastery, survival, and spirituality) and by integrating components of existing hope interventions such as the hope process framework and the universal developmental components of hope into a psychoeducational hope-based intervention (Farran, Wilken, & Popovich, 1992; Farran, Herth, & Popovich, 1995; Morse, & Doberneck's, 1995).

In addition to describing the intervention, the study engaged qualitatively in understanding the experiences of the TKR patients who took part in the intervention. A study could thus, for the first time, provide an insider's perspective on the experiences of TKR patients receiving I-HOPE.

Exploring such an intervention in respect of TKR was unique as it had not been done before. TKR is aimed at restoring health and quality of life in contrast to treating imminent life-threatening diseases, where hope-based interventions have been

¹ The brief hope-based in-hospital intervention will further be referred to as I-Hope to encapsulate the essence of the intervention as an Integrative (I) Hope (H) intervention. See the concept clarification (par. 1.5.1) for an explanation of the intervention.



explored up to now (Anbar, & Murthy, 2010; Herth, 2001; Rustøen et al., 2011). The brief nature of the intervention in the present study was further unique in that it focused on an in-hospital process.

The study also deviated from previously explored hope interventions in that it did not focus on group-based intervention but on intervention on an individualised level.

With regard to psychological practice, the insights gained from the study could help in coordinating holistic, multidisciplinary interventions and add to our understanding of preventative care in in-hospital contexts. It may also place emphasis on the potential role educational psychological interventions can play within a hospital context. Lastly, a description of such interventions from the patient's perspective could provide policy makers with valuable insights into how to improve in-hospital care. It could also assist them in understanding the potential value of holistic health care during TKR and consequently guide future financial investments.

1.2 PERSONAL AND ACADEMIC RATIONALE

In 2012, I was invited by an orthopaedic surgeon with an orthopaedic practice at a private hospital in Pretoria to join the multiprofessional team treating his TKR patients. Apart from the doctors, the team consisted of nurses, dieticians, physiotherapists, and me as an educational psychologist. As an educational psychologist registered with the Health Professions Council of South Africa (HPCSA), my scope of practice and competencies allows me to intervene, often preventatively, with people of all ages, optimising psychological insights to overcome patients' psychological problems (Department of Health, 2011; Psytech South Africa, 2015). Working from a preventative stance in optimising human functioning, I believe that positive psychology best informs my practice.

In line with my own professional stance, the orthopaedic surgeon expressed a need for a holistic preventative intervention programme that could guide his patients positively through the surgical process (Surgeon, personal communication, September 11, 2012). This presented me with a formidable challenge as the literature indicates that TKR patients frequently experience feelings of anxiety, surgical trauma, physical and emotional fatigue, as well as adjustment-related depression with this type of



procedure (Hall, Peerbhoy, Shenkin, Parker, & Salmon, 2000; Nickinson, Board, & Kay, 2009; Salmon et al., 2001; Seers et al., 2008). I saw my membership of the team as an opportunity to use hope as a positive psychological construct to guide these patients through this challenging time in their lives. This was how the idea of I-HOPE was born.

My decision to use I-HOPE with TKR patients was guided by various views I encountered in the literature. I found it especially significant that hope is a central goal in many psychotherapeutic interventions, even those not specifically based on hope theory (Snyder, & Taylor, 2000). Research studies have reported on the importance of hope in psychotherapy, yet interventions using a specific hope theory to instil hope in patients have received little research attention (Larsen, & Stege, 2010a). Weis and Speridakos (2011) recommend the use of hope theory as a model for selecting evidence-based treatments to guide interventions, as was the case with the intervention in the present study. It was found that hope theory could easily be integrated into psychoeducational as well as cognitive-behavioural strategies and that it could be complemented by a caring therapist-client relationship (Duggleby et al., 2007; Herth, 2000, 2001; Rustøen et al., 2011).

It was particularly studies in medical environments where hope intervention was used with success, such as those of Duggleby et al. (2007), Herth (2000, 2001), Rustøen et al. (2011) and Rustøen et al. (1998), that led me to believe that this type of intervention could hold similar benefits for TKR patients.

The theoretical framework for the present study was the integrative hope theory of Scioli et al. (2011). The rationale for using this theory was a need experienced by me as an in-hospital therapist to use a broader definition of hope during interventions. This need was based partly on my personal experiences through intervening with TKR patients and on proposals in psychological literature to expand Snyder's (2002) unidimensional hope theory (Bernardo, 2010; Du, & King, 2013). Scioli et al.'s (2011) theory includes a multidimensional understanding of hope and thus moves away from the unidimensional goal-directed understanding of hope in psychology that largely ignores the other hope dimensions (Scioli et al., 2011). In this regard, I often found that the in-hospital focus on goal setting during TKR was experienced by my patients as insensitive to their particular needs.



I-HOPE was implemented in 2012 and was refined during the two years leading up to this research. After deciding to research the intervention, I passed the role of therapist to a colleague trained in the use of the intervention, and I took on the role of researcher. My research focus was thus to describe how a hope-based intervention could be conceptualised on the basis of Scioli et al.'s (2011) theory and also to explore and describe the TKR patients' expriences of the intervention.

My decision not to measure the intervention objectively was also influenced by TKR patients' tendency to portray their health interventions positively in public while often holding contradictary views in private (Woolhead et al., 2005). It was therefore important to consider the patients' personal experiences of I-HOPE.

1.3 PURPOSE OF THE STUDY

The purpose of this descriptive-exploratory case study was to describe how hope theory could be used to structure I-HOPE for TKR patients. The study also sought to explore and describe the experiences of 12 TKR patients at a private hospital in Pretoria with regard to the intervention. For the purposes of this research, I-HOPE can be defined as an individual intervention based on the theory of Scioli et al. (2011). The intervention took place over four in-hospital sessions, one before and three after TKR surgery. It incorporated components of previously explored hope-based interventions that could be aligned with the theory, including elements of the hope process framework (Farran et al., 1992; Farran et al., 1995) and the universal developmental components of hope (Morse, & Doberneck, 1995). Hope is defined by Scioli et al. (2011, p. 79) as follows:

"A future-directed, four channel emotion network, constructed from biological, psychological, and social resources. The four constituent channels are the mastery, attachment, survival, and spiritual systems (or sub-networks). The hope network is designed to regulate these systems via both feed-forward (expansion) and feedback processes (maintenance) that generate a greater perceived probability of power and presence as well as protection and liberation."



1.4 RESEARCH QUESTIONS

This descriptive-exploratory study is guided by the following primary research questions.

- How did hope theory inform a brief hope-based in-hospital intervention for 12 TKR patients? [Descriptive research question]
- What were 12 TKR patients' experiences of a brief hope-based in-hospital intervention at a private hospital in Pretoria? [Exploratory research question]

In placing both these questions as central to my study, it is implied that I view them equally important and in relationship to each other. The potential interactive relation between these questions within this unique research design might hold implications for both psychological research and practice. The descriptive research question will be addressed as the outcome of my literature review in Chapter 3 of this study. In order to address the exploratory research question, I present the following secondary questions. By answering these questions, the primary exploratory research question will be best addressed.

Secondary research questions

- How acceptable was I-HOPE to the 12 TKR patients?
- How did I-HOPE via the channels of mastery, attachment, survival, and spirituality support the 12 TKR patients?

1.5 **RESEARCH ASSUMPTIONS**

The study was based on the following theoretical assumptions.

- Hope is multidimensional and can be developed by attending to the individual's emotional network as described by Scioli et al. (2011).
- Hope exists on a continuum ranging from high levels of hopefulness to feelings of hopelessness.
- Hope is a skill that people can learn people should therefore be taught about hope, and trained in it, through a hope-based intervention.
- Hope is an antecedent of coping.
- The lived experiences of participants are valuable and can contribute meaningfully to scientific knowledge.



1.6 CONCEPT CLARIFICATION

The unit of analysis was the development of I-HOPE for TKR patients and how it was experienced by this study's participants. It is therefore important to explain the concept of such an intervention as well as related concepts.

1.6.1 BRIEF HOPE-BASED INTERVENTION

Brief interventions focus on utilising people's strengths and finding solutions to challenges (Michael et al., 2000). Although models of brief interventions have existed for many years, traditional thinking in psychotherapy has recently become more aligned with the time and resource constraints of the 21st century (Erickson, 1954; Gingerich, & Eisengart, 2000). Michael et al. (2000) promote the use of hope-based interventions as a form of brief intervention by acknowledging the commonalities between hope theory and brief solution-focused therapies in that both are strength based, future oriented, and goal directed. Brief solution-focused therapies also often acknowledge the influence of systemic change, which can be integrated with the multidimensional theoretical perspective on hope (Michael et al., 2000; Scioli, & Biller, 2009). A meta-analysis of 34 brief psychological therapies found these therapies to be effective, yet their effect sizes seemed to be lower compared to longer interventions (Cape, Whittington, Wallace, & Underwood, 2010).

Brief intervention is interpreted differently in different contexts, yet, in the context of traditional psychotherapy, it can be interpreted as not extending beyond 20 sessions (Schuyler, 2000). This interpretation of brief intervention should, however, be revised in terms of preventative hope-based interventions not aimed at ameliorating psychopathological conditions. According to Talley (1992) interventions that span between one and seven sessions can be referred to as very brief interventions, as is the case in the intervention described in this study. Such very brief interventions have the ability to positively influence people's perspectives on a challenge (Talley, 1992).

The geographic and logistic constraints of the TKR participants in the study limited their availability for longer-term interventions as the intervention sessions had to take place in a short in-hospital period of usually one week between admission and discharge. Being an in-hospital intervention, it was problematic to hold intervention



sessions for lengthy periods while the participants were under strict medical care in the hospital. This was particularly problematical after surgery had taken place. The intervention was also brief in relation to similar hope-based interventions most of which consisted of between five and eight sessions over a one to two-month period (Herth, 2001; Rustøen et al., 2011). The studies of Berg et al. (2008) and of Feldman and Dreher (2012) reveal that brief hope-based interventions of less than five sessions can be successfully implemented in non-medical contexts, yet their efficacy needs still to be explored in medical contexts.

Very brief intervention in this study refers to both the time and frequency of the intervention as restricted by the brief period of in-hospital stay. The intervention was administered individually in four distinct sessions the first of which lasted approximately 60 minutes (pre-surgical) and the second to the fourth approximately 30 minutes each (post-surgical), adding up to a total of two and a half hours spent with the therapist.

1.6.2 HOPE

Understanding of hope can be illusive. It has been described in the literature as goaldirected cognition (Onwuegbuzie, Leech, & Collins, 2010; Snyder, Harris, et al., 1991), as an orientation (Edey, Larsen, & LeMay, 2005), as giving meaning to life (Jevne, 2005), as an expression of religion and cultural beliefs (Maree, & Maree, 2013; Scioli, & Biller, 2009). Hope in the literature has been further refined to mean a trait or a state as general or particularised (Dufault, & Martocchio, 1985; Morse, & Penrod, 1999; Snyder, 2000b). This study integrated the concept of hope into a fundamental understanding of hope in line with the thinking of Scioli et al. (2015).

Contrary to the traditional unidimensional understanding of hope in psychology (Snyder, 2000b), hope in the present study can best be understood using a specific multidimensional lens as found in the definition of Scioli et al. (2011, p. 79):

"Hope is a future-directed, four-channel emotional network constructed from biological, psychological and social resources. The four constituent channels are the mastery, attachment, survival and spiritual systems (or subnetworks). The hope network is designed to regulate these systems via both feed-forward (expansion) and feedback processes (maintenance) that generate a greater



perceived probability of power and presence as well as protection and liberation."

This definition includes other multidimensional definitions or models of hope as it captures common elements of hope, namely that hope is dynamic (changes over time), that it is essential for the experience of purpose and personal meaning, that it needs to be learnt through guidance and support, and that it is future oriented and goal directed (Scioli, & Biller, 2009, 2010).

1.6.3 HOPELESSNESS

Although it was not the primary focus of this study, hope needs also to be understood in relation to hopelessness, which is the primary predictor of suicide and a major factor in depression (Beck, Brown, Berchick, Stewart, & Steer, 1990; Scioli, & Biller, 2010). Losing one's mobility, as in the case of TKR patients, can impact on one's sense of confidence and self-esteem and even in recovery from TKR can cause serious problems (Pryor, 1991). If people feel hopeless, the world, and their future, can become a major challenge (Scioli, & Biller, 2010). Hopelessness in this study was understood as related to yet destinct from depression (Mascaro, & Rosen, 2005; Raleigh, 2012; Sachs, Kolva, Pessin, Rosenfeld, & Breitbart, 2013) and defined as "a feeling of despair and discouragement; a thought process that expects nothing; and a behavioural process in which the person attempts little or takes inappropriate action" (Farran et al., 1995, p. 25). It thus has directly the opposite effect on a person as hope. The hopeless person feels disempowered instead of empowered, detached from instead of attached to others, and devoid of existential meaning and may ultimately not survive (Scioli, & Biller, 2009).

1.6.4 HOPE DEVELOPMENT

Hope develops through a process of lifelong learning as both a generalisable trait and a particularised (domain specific) state with specific goals (Dufault, & Martocchio, 1985; Snyder, 2000a). The development of general hope was understood in this study – in line with Erikson's (1982) developmental theory – as emerging from the trust gained during a secure attachment (Khodarahimi, 2013; Snyder, 2000a). The present study also supports Scioli and Biller's (2010) view of developing hope as a systemic



process in which the biological (nature) and psychosocial (nurture) components work together to negotiate the experienced world through mastering different environments. Further, the study supports the view that the emotions involved in forming secure attachments and the quest for both survival and meaning making (spiritual) drive the process of hope development (Scioli, & Biller, 2010). Hope was therefore viewed as being constructed in line with the ecological development theory of Bronfenbrenner (1992), that is, as developing over time influenced by personal and environmental factors. This theory is referred to as the bio-ecosystemic theory as it embraces the biological component of hope development within the context of a medical challenge and can be related to the well-known bio-psychosocial theory often used in health psychology (Straub, 2012). Yohani and Larsen (2012) describe hope development in terms of Bronfenbrenner's (1992) theory as a reciprocal interaction in a system driven by subjective experiences. Lastly, in this study of hope development, hope is seen as being in a dialectical relationship with hopelessness (Farran et al., 1995). This implies that hope or hopelessness can also be developed through the influence of environmental conditions. The dialectical relationship can be related directly to the idea that hope is a system that needs constant expansion (feeding forward) and maintenance through feedback to ensure its sustainability (Farran et al., 1995; Scioli et al., 2011).

Important factors in the development of hope are, according to Snyder, Feldman, Shorey, and Rand (2002), attachment and challenge. In this regard, the present study also incorporated the universal components of Morse and Doberneck (1995) in order to develop hope in a challenging situation such as TKR. These components are elaborated on in the discussion on hope intervention (see Chapter 3).

1.6.5 ARTHROPLASTY/TOTAL KNEE REPLACEMENT (TKR)

Arthroplasty can be defined as joint replacement surgery. It is directly linked to worn cartilage and is commonly used in the knee and hip areas but is less common in other joints such as the wrist (Manner, 2011). Osteoarthritis is the most common form of arthritis (inflammation of the joint) resulting in the gradual wearing away of the cartilage covering on bones. Rheumatoid arthritis, on the other hand, is a chronic inflammatory disease of the joints that results in pain, stiffness, and swelling. Arthritis affecting a person's weight-bearing joints is becoming increasingly prevalent among



older people (Rand, 1993). For the purposes of this study, arthroplasty refers specifically to total knee replacement (TKR) surgery.

1.6.6 TKR PROCESS

TKR is a procedure (Salmon et al., 2001) involving both internal and external processes that often require an interdisciplinary support system (Thomas, & Sethares, 2010). On a physical level, the TKR process involves making sure that patients meet the criteria for TKR, preparing them for surgery, administering an appropriate surgical procedure in a clinically correct way, and monitoring their recovery/rehabilitation through physical intervention (Lucas, 2007; Quintana et al., 2006). On a psychological level. the process has numerous challenges with patients experiencing disempowerment leading up to the surgery and regaining personal empowerment after surgery through the recovery process (Loft, McWilliam, & Ward-Griffin, 2003). Pryor (1991) maintains that recovering one's mobility, as in the case of TKR, is not only a physical process, but a mental journey towards emotional recovery requiring personal ego strength and social support. The TKR process is thus experienced on a biological, psychological, and social level (Salmon, & Hall, 1997).

The study covered the TKR process, which included the bio-psychosocial processes in the in-hospital period and up to five months afterwards, which could be related to receiving I-HOPE.

1.7 MASTER THEORY OF THE STUDY

This study had, as discussed earlier in this chapter, two distinct focuses. The first was to describe I-HOPE that was used to foster hope in the 12 TKR patients who participated in the study. The second was to explore and describe the 12 TKR patients' experiences of the intervention. This entailed two different yet complementary approaches in the researcher's understanding of the phenomenon.

In order to address the first focus and also the secondary research question, "How can hope theory inform I-HOPE for 12 TKR patients?", I followed a descriptive research process that entailed using a specific hope theory to guide the description of the intervention. The second focus (see earlier description of the focus) followed an



exploratory research process that did not require a guiding theory (Baxter, & Jack, 2008). In the next section, I describe the theory that guided me in conceptualising I-HOPE.

The master theory selected to inform the intervention in this study was Scioli, Ricci, Nyugen, and Scioli's integrated theory of hope (Scioli, & Biller, 2009, 2010; Scioli et al., 2011). I chose this theory for various reasons. Firstly, in conceptualising the theory, Scioli et al. (2011) reviewed hope research in the fields of psychology, philosopy, theology, psychiatry and nursing thus implying a comprehensive interdisciplinary view of hope.

Secondly, the theory contains a more comprehensive and inclusive approach to understanding hope as the theorists (Scioli et al., 2011) combined Snyder, Harris et al.'s (1991) unidimensional understanding of hope as a cognitive goal-directed process (mastery) with aspects of a multidimensional understanding of hope such as the cognitive-temporal dimension (mastery), the affective-behavioural dimension (attachment, mastery), and the affiliative-contextual dimension (attachment, survival, and spirituality) (Dufault, & Martocchio, 1985; Herth, 1992; Weis, & Speridakos, 2011). It also includes the spiritual hope dimension included in the conceptualisation of hope in the field of nursing (Farran et al., 1992; Farran et al., 1995).

Thirdly, the integrative theory was chosen because in it hope is regarded as a developmental process in which hope is seen as a skill that can be learned, expanded, and refined (Scioli, & Biller, 2010). Lastly, the integrative theory was chosen because of its application value in a medical context to promote healing (Scioli, & Biller, 2009, 2010).

According to Scioli et al.'s (2011) integrated hope theory, hope is an emotional network constructed from biological, psychological, and social resources. This network consists of four sub-networks/channels of human needs/motives, namely mastery, attachment, survival, and spirituality. Five levels of hope development are achieved through people's underlying motives to master their environment, form beneficial attachments, and survive. On the first level, biologically based motives are seen as the genetic blueprints of hope (Scioli et al., 2011). Biological components such as the brain structures, the hormones, the fight-flight response, and the immune system all



play a role on this level and are aimed at meeting mastery, attachment, and survival needs (Scioli, & Biller, 2009).

The biological factors interact on the second level with environmental influences such as family, community, and culture. Scioli et al. (2011) explain that nature and nurture play an important role in influencing hope in a person and are based on psychological, social/cultural, and spiritual factors. In this context, mastery is attained by having specific talents, goal directedness, support, and guidance towards a sense of purpose (Scioli et al., 2011). As attachment motive, the presence of someone who can be trusted and whose love and care are experienced contributes towards hope, while the survival motive is expessed by demonstrating resilience and coping skills when required (Scioli et al., 2011).

On the third level, a hopeful core is established through developing traits oriented towards mastery, attachment, and survival. Scioli and Biller (2009) refer to such traits as personality dispositions towards or away from hope. They may include mastery-oriented traits, the will to hope, goal-oriented trust, mediated control, and sanctioned commitment (Scioli et al., 2011). The motives for these traits may be mastery or attachment or both. Attachment-oriented traits may include a relationship of trust, openness, and feeling spiritually connected. Survival-oriented traits may arise from attachment or survival motives and may include survival-oriented trust and care recruitment, terror management and liberation beliefs, resiliency and self-regulation, and, lastly, spiritual integrity and symbolic immortality (Scioli et al., 2011).

Establishing a faith system as a centre for values is seen as the fourth level of hope development involving all motives of attachment mastery and survival. A faith system is considered the product of trust through mediated control and setting boundaries between the self and others (Scioli, & Biller, 2009).

On the fifth level, hope beliefs and behaviours shaping our daily hopeful functioning are seen as evidence of our hope. According to Scioli et al. (2011), this involves beliefs, feelings, and actions in expressing hope. On a mastery level, it includes a belief of empowerment, a feeling of being supported, and a willingness to collaborate with others (Scioli et al., 2011). On an attachment level, it is set in the belief that the universe is kind, feelings of connectedness with others, and openness towards others



(Scioli et al., 2011). On a survival level, it includes the belief that protection is accessible, and feeling safe and able to self-regulate one's actions (Scioli et al., 2011). The table below summarises the integrative theory.

			1
<u>5th Level</u> Beliefs, & Behaviours			
Daily hope beliefs	I am empowered	The universe is kind	Protection is available
Daily hope feelings	Supported	Connectedness	Safe
Daily hope actions	Collaboration	Openness	Self-regulation
<u>4th Level</u> <i>Faith System</i> Elements of faith	Centres of Value		
<u>3rd Level</u>	The will to hope		
Hopeful Core	Goal-orie	ented trust	
Mastery-oriented traits	Mediated (colla	borative) control	
	Sanctioned	commitment	
		Relational trust	
Attachment-oriented traits		Openness	
		Spiritually connected	
Survival-oriented traits		Survival-oriented trust, & care recruitment Terror management, & liberation beliefs Resiliency, & self-regulation Spiritual integrity, & symbolic immortality	
2nd Level:			
Nature, & Nurture			
Psychological endowments	Talent, goal directness	Trust, & openness	Resiliency, coping skills, & ego defences
Social, & cultural endowments	Support & Guidance	Care and love	Cultural terror management
Spiritual endowments	Purpose	Presence	Salvation
1st Level:			
Hope Blueprints			
Biological motives	Mastery motive	Attachment motive	Survival motive

Table 1.1:	Integrative hope	e theory of So	cioli et al.	(2011, p. 80)
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1.8 APPLYING THE MASTER THEORY

This section discusses briefly how the integrative theory of Scioli et al. (2011) informed this study's I-HOPE. A comprehensive discussion of this topic follows in Chapter 2. A graphic representation of the intervention is given at the end of this section.



Session 1, the longest of all the sessions, was divided into three sections, 1a, 1b, and 1c. In this session, the intervention was informed by all levels of the hope network as described by Scioli et al. (2011). Section 1a included a DVD recording comprising a series of short narratives from various individuals who shared their hopeful attitudes to life (Jones, 2007).

The use of a DVD during the intervention was inspired by earlier hope-based interventions in palliative cancer care (Duggleby et al., 2007; Duggleby et al., 2013). According to Niemiec and Wedding (2014) positive psychological DVD's inspire positive emotions in people (including hope), which are considered important in psychoneuroimmunology as each emotion is associated with chemical packages (hormones) that stimulate and sustain health in patients (Ayers, & De Visser, 2011; Broadbent, & Loft, 2010; Scioli, & Biller, 2009). I therefore believed that the DVD activity could potentially stimulate the biological component, which addresses hope on level 1 of the integrative hope theory by inspiring positive emotions in the participants. I also believed that the DVD could create a larger virtual social network for the patients by allowing them to identify with role models of hope in the DVD and thereby feel attached to others (Scioli et al., 2011). It could also stimulate their personal narratives as they could identify with the characters in the DVD and relate them to their personal nature and nurture experiences as integrated into level 2 of Scioli et al.'s (2011) integrative hope theory. In positive psychology, DVD's (movies) are often used to promote positive emotions in an educational and inspirational way (Niemiec, & Wedding, 2014). It is also acknowledged in the literature that movies can evoke emotions, generate discussions, and create vicarious learning experiences (Herrman, 2006).

During section 1b of session 1, the patients were welcomed as partners in the healing process to enhance a sense of connectedness thereby stimulating attachment (level 5) and engaging with their ability to trust and be open to care (level 2). Scioli and Biller (2009) emphasise the therapist-patient bond in mediating a sense of mastery as a crucial factor, especially in level 3 of the integrated hope theory. The patients were requested to share their personal hope narratives with the therapist during this session. These narratives gave the therapist access to the richness of dominant and alternative themes in the patients' lives and often provided rich metaphors of meaning



to engage hope in the patients through any of the sub-networks of hope (Morgan, 2000).

The last section of this session (1c) was aimed at assisting the patients to express their expectations, wishes, and fears through an activity called 'the get well card'. This allowed engagement with the patients' goals as mastery motives, their fears as survival motives, and their sense of meaning and purpose as spiritual motives (Scioli et al., 2011).

Session 2 started with a post-surgical debriefing aimed at supporting the patients' survival motive towards hope to establish a sense of control in terms of greater self-regulation (mastery motive) and, where needed, trauma management (terror management – survival level 3). It also aimed at providing the patients with the opportunity to reflect on their pain experience – this is because the emotional component of pain can be considered a most useful survival mechanism (Watt, & Spilberg, 2002). This session sought to assist the patients in mastering the hospital environment by interpreting it as a place of safety, support, and connection with people (level 5) and thereby raising hope by establishing a sense of calmness (Scioli et al., 2011). The vision with this session was that it would engage the patients psychoeducationally in talking about their physical experiences of survival and mastery and their relational support as attachments towards hope, their sense of purpose and meaning during TKR (mastery and spirituality), as well as their goals and experienced barriers to hope (mastery directed) (Farran et al., 1995; Scioli et al., 2011).

During session 3, the therapist once again emphasised her supportive role by being a witness to the participants' struggles or successes on the path towards achieving their goals (attachment and mastery motives – level 3 and 5) through psychoeducational engagement in planning for a hopeful future and the cognitive reframing of barriers to hope (Herth, 2001; Larsen, & Stege, 2010a, 2010b). The participants were made to feel safe, and the person-centred nature of the intervention allowed for openness and feelings of connectedness (attachment – level 5). At the same time, the participants' sense of purpose and meaning (faith-based values) was supported by the therapist (attachment/spirituality/mastery – level 4) (Scioli et al., 2011). In this session, the



therapist made the participants aware of their hope resources on the path towards mastery (Farran et al., 1995; Scioli et al., 2011).

In the last session (session 4), the therapist summarised the previous sessions and gave the participants time to reflect on the TKR process and hope intervention. Using the HOPE acronym (Farran et al., 1992; Farran et al., 1995) to guide the session's discussion, the therapist allowed the participants to take the lead and thereby establish a sense of self-regulation (mastery – level 5). Time was also made to ensure that the participants reflected on the 'get well card' and the goals set in it (mastery – level 3).

An intervention based on the integrative theoretical framework (summarised in Table 1.2) served the purpose of expanding and maintaining hope in order to provide a buffer against problems and promote an enhanced sense of freedom (Scioli, & Biller, 2009, 2010; Scioli et al., 2011). The sessions were named in accordance with the metaphor of building a house of hope through finding hope, bonding for hope, enhancing hope and reminding about hope (Lopez, Floyd, Ulven, & Snyder, 2000).



Table 1.2: Summary of I-HOPE

	Session	Time Min.	Therapeutic sub-goals towards hope enhancement as main goal	Content/Activities	Theoretical base: Scioli et al. (2011) and related hope literature		
BEFORE SURGERY – IN HOSPITAL	Session 1a DVD session	±20	 Create a hopeful expectation. Inspire a perspective of hope. Create a positive mindset. 	• "DVD"	 Inspiration towards mastery. Expectation towards survival and mastery. Rational engagement (Farran et al., 1995). 		
	Session 1b FINDING HOPE, & BONDING FOR HOPE	±30	 Welcome participants into the caring hospital community (sense of belonging). Establish and motivate willingness to partner with hospital staff towards mobility recovery. Establish a bond of care and trust between therapist and participants. Tap into participants' personal hope narrative. 	 "In-touch/In-tune" (Bonding) "Celebrate hope" (Hope narrative) 	 Foster sense of attachment and willingness to master. Tap into mastery narratives. Tap into hope narratives (Larsen, & Stege, 2010a). 		
	Session 1c FINDING HOPE, & BONDING FOR HOPE	±30	 Assist participants to express their expectations, fears, and wishes. Create realistic expectation of TKR process. Assist participants in framing value-centred goals. Create a sense of meaning/purpose during the TKR process. Assist participants in bracing for possible negative outcomes. 	 "Get Well Card" (Goal setting) "Buckle Up" (Assess reality) 	 Through expression of fears, hope is fostered by survival motives, while wishes and expectations propel participants towards hope though mastery motives. Assess problems realistically and brace for negative outcomes (Morse, & Doberneck, 1995). Spiritual and mastery motives initiate participants' sense of meaning and purpose. 		



Session 2 ENHANCING HOPE	 ±40 Provide emotional support through short post- surgical debriefing in terms of health (H). Assist towards emotional self-regulation – calming participants if necessary. Provide emotional support by creating an expectation that things will improve. Teach HOPE acronym. Raise awareness of available supportive relationships (friends, family, but also in- hospital) to create a positive sense of others (O). Tap into participants' personalised sense of meaning/purpose (P). Raise participants' awareness of hope resources. Engage (E) participants' thoughts in terms of their set goals. Identify barriers to hope. Establish personal priorities. Encourage hope in participants through life awareness. 	 "Debrief" (After surgery) "HOPE-scouting" (Learning about hope) "Becoming aware" (Mindful) 	 Being present addresses the attachment motive during participants' quest for mastery and/or survival after the recent surgery. Psychoeducational intervention to strengthen participants' ability to master the challenge of TKR. Using the hope process framework acronym provides a cognitive grip on understanding the hope and engages participants with feeling attached, obtaining mastery, a will to survive and a spiritual awareness (Farran et al., 1995). Life awareness and celebration addresses the spiritual and mastery motive (Herth, 2001; Jones, 2007). Rational engagement with priority goals, resources, and barriers stimulates hope through a sense of mastery during the TKR process.
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AFTER SURGERY – IN HOSPITAL	Session 3 REMINDING ABOUT HOPE	±30	 Provide emotional support by being witness to participants' progress or struggles towards their goals as discussed during "the get well card" activity. Provide emotional support by creating an expectation that things will improve. Engage participants' sense of meaning/purpose (reinforce). Provide a voice for spiritual meaning making. Remind participants about their goals (reinforce). Address barriers to hope if necessary. Remind participants about their resources. 	 "Reclaiming/Reframing (Cognitive and affective support session) 	 Emotional support addresses the attachment motive of hope. Psychoeducational intervention strengthens participants' ability to master the challenge of TKR. Rational engagement with goals, resources, and barriers stimulates hope through a sense of mastery during the TKR process.
IN HOSPITAL BEFORE DISCHARGE	Session 4 REFLECTION	±20	 Summarise all sessions and reflect on future initiatives towards living a hopeful life. Raise awareness of available support networks, including providing contact details for further psychological intervention. Identify internal and external resources after discharge. Encourage participants to initiate healing by taking action towards achieving goals. Encourage participants to keep in touch with others. Encourage the expression of hope in a personally meaningful way. Wish the participant a hope-filled recovery. 	 Mirroring (Guided reflection) 	 The determination to endure is stimulated (Morse, & Doberneck, 1995) and linked to the survival motive. Provide a platform to communicate further fears, wishes, and expectations towards attaining hope. This is likely to address participants' attachment and mastery needs. Participants are met on the level of their perceived individual needs and challenged to pursue hope by extending goals to the extended recovery period after discharge.



1.9 PARADIGMATIC PERSPECTIVES

This study was grounded in the philosophy of interpretivism. The interpretive perspective is based on the belief that man is able to create personal meaning and embraces pluralism rather than relativism (Baxter, & Jack, 2008). This philosophy is appropriate for a case study research approach interested in exploring participants' personally interpreted understanding of their experiences. This philosophical perspective is closely associated with the qualitative methodological paradigm that framed the present study. Such a paradigm focuses on exploring people in a naturalistic social context and has little interest in generalisability (Nieuwenhuis, 2012a). Its aim in this study was to explore and describe particular human experiences in order to gain greater understanding of these experiences (Myers, 2000). The paradigmatic perspective and methodological paradigm are described in detail in Chapter 3.

1.10 RESEARCH METHODOLOGY

A descriptive-exploratory case study research design was used to conceptualise I-HOPE, which enabled me to explore and describe the 12 TKR patients' experiences of I-HOPE. The descriptive part of the design included a comprehensive review of the literature to help describe the I-HOPE intervention, while the exploratory part focused on exploring the participants' experiences of I-HOPE in the TKR process.

The study process can be divided into three stages. Stage one was the descriptive part of the study in which the planning and design of I-HOPE was done. Stage two was the implementation part of the intervention, which did not form part of the data collection. The intervention process was respected in terms of therapist-client confidentiality and was not the focus of the study. Stage three was the exploratory part of the study where data were collected on the participants' experiences of the intervention. A diagrammatic representation is given below.



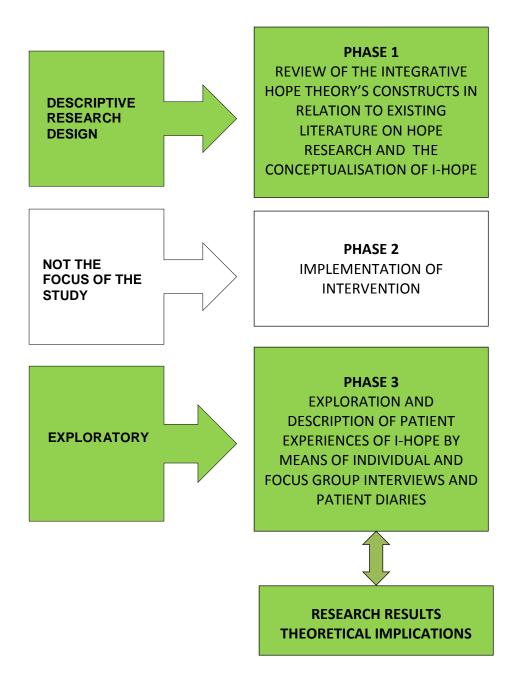


Figure 1.1: Diagrammatic representation of the research process

In the descriptive part of the research process, hope literature was reviewed, including the master theory on which the hope-based intervention was based. The literature on existing hope-based interventions in medical contexts was then more closely examined, identifying approaches, techniques, and activities that had proved valuable in supporting hope in patients. These approaches, techniques, and activities were then referenced against the integrative hope theory (Scioli et al., 2011) to develop a theory-based intervention, which is described in Chapter 3 of this study.



During the exploratory part of the research, I used purposeful sampling in the case study. The purposeful sampling was because the participants were selected based on their osteoarthritis-related need for TKR surgery in the period 1 August 2014 to 31 December 2014 (for the inclusion and exclusion criteria see Chapter 3). The study was thus restricted to a specific private hospital in Pretoria where the TKR surgery was performed. Initially, 16 patients consented to participate in the study. Two of the participants withdrew before the intervention commenced without giving any reason, and another two withdrew without completing I-HOPE due to medical complications. They therefore met the exclusion criteria set for this study and were from this point onwards not regarded as participants. Twelve patients accordingly participated in the research.

The data collection strategies included the use of participant diaries kept by participants while in hospital, 12 semistructured individual interviews one month after discharge, a focus group interview, and the researcher's journal. The documentation of the data included audio recordings and transcriptions of the individual and focus group interviews, participant diaries, and the researcher's journal.

An inductive thematic analysis (Creswell, 2014a) of the data was carried out as part of the exploratory process, and the findings were related back to the theory and, more specifically, to the theoretical framework of the intervention. Lincoln and Guba's (1985) guidelines were followed to ensure the credibility, transferability, dependability, confirmability, and authenticity of the data.

Lastly, strict adherence was given to the ethical protocol governing research with vulnerable research participants. This included obtaining informed consent from the participants, ensuring their voluntary participation, protecting them from harm during the research process, ensuring their anonymity, and affording them confidential treatment. The necessary ethical clearance was obtained from the University of Pretoria's Ethics Committee. The following table shows the methodological thinking behind the study.



STUDY PARADIGM	A qualitative study paradigm was used.			
RESEARCH DESIGN	A descriptive-exploratory case study design was used to gain an in-depth, real-life perspective of a bounded system (Yin, 2014).			
BINDING THE CASE	Convenience and purposeful sampling was used involving 12 patients of 50 years and older undergoing TKR in a South African private hospital between 1 August 2014 and 31 December 2014. Inclusion and exclusion criteria are discussed in Chapter 3.			
DATA COLLECTION METHODS	Descriptive: A literature review which included the PsychINFO, ProQuest and MEDLINE databases.			
	Exploratory: The researcher's journal, participant diaries, and semi-structured and focus group interviews were used.			
DATA DOCUMENTATION	Researcher's journal, participant diaries, and audio recordings of interviews were transcribed (including researcher observations).			
DATA ANALYSIS AND INTERPRETATION	The study included a combination of deductive and inductive reasoning as a data analysis process. Inductive reasoning was used mainly in the exploratory design, which included an inductive thematic analysis consisting of data coding to find categories, patterns, and themes in an interpretive way (Cohen, Manion, & Morrison, 2011; Creswell, 2014b). A deductive reasoning process was used to structure some of the identified data categories to relate back to the study's master theory (Scioli et al., 2011). A deductive analysis of existing hope-based intervention literature was also done as part of the development of I-HOPE.			
ETHICAL CONSIDERATIONS	Guidelines for health research were adhered to. These included (i) informed consent, (ii) voluntary participation, and (iii) protection from harm, which included anonymity and confidentiality.			
QUALITY CRITERIA	The five quality criteria used were credibility, transferability, dependability, confirmability, and authenticity (Lincoln, & Guba, 1985).			

Table 1.3: Methodological summary (for a detailed discussion see Chapter 4)

1.11 CHAPTER OUTLINE

CHAPTER 1: OVERVIEW OF THE STUDY

This chapter sketches the background to the study from an educational-psychological perspective and discusses the research domain and the rationale for the research. It also positions the study in terms of its aims and research questions and elaborates on the conceptual and theoretical underpinnings of the study before discussing the chosen methodology and the ethical considerations that guided the research.

CHAPTER 2: LITERATURE REVIEW

This chapter discusses literature on the concept of hope and the development of hope theory within the domain of positive psychology. The need for hope during TKR is



reviewed in the light of health psychology and, specifically related to the integrative hope theory (Scioli et al., 2011).

CHAPTER 3: DESCRIPTION OF I-HOPE

Elaborating on the overview given in Chapter 1, this chapter describes I-HOPE as informed by existing hope-based intervention literature and the studies master theory, within the application context of TKR. It thereby concludes the descriptive section of the study in terms of I-HOPE.

CHAPTER 4: RESEARCH PROCESS

This chapter outlines the research design, the research methodology, and the research process. Choices pertaining to the methods of data collection, data analysis, and interpretation are explained in terms of the chosen research paradigm. Strategies to ensure the quality of the data as well as the ethical considerations guiding the study are discussed, elaborating on the overview given in Chapter 1.

CHAPTER 5: RESULTS AND INTERPRETATION OF THE DATA

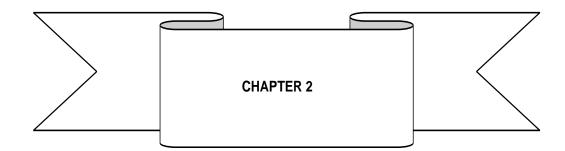
This chapter deals with the results and findings of the research and relates it back to existing literature. Themes that emerged from the data analysis are discussed descriptively in terms of the patients' experiences of the hope intervention.

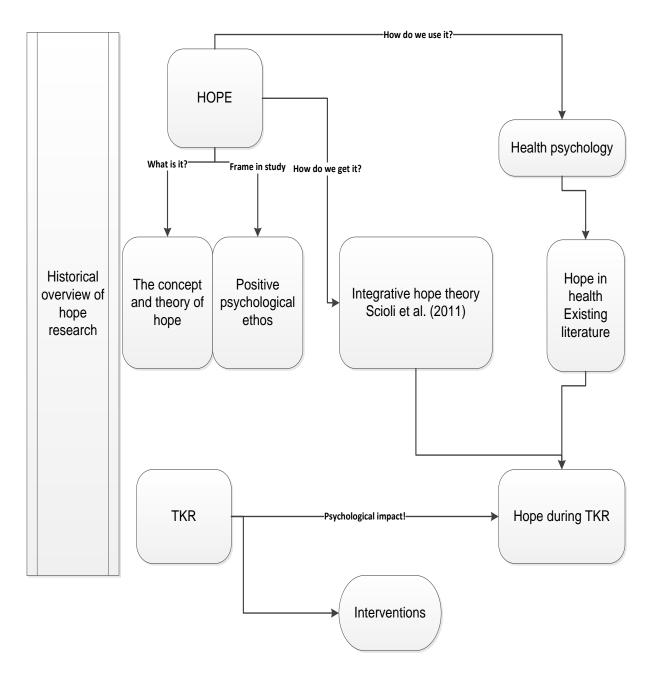
CHAPTER 6: FINAL CONCLUSIONS AND RECOMMENDATIONS

This chapter concludes the study by relating the research results to the research questions. The possible contributions as well as the challenges of the study are discussed and the limitations acknowledged. Recommendations for further research are made.

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Chapter 2 Broad Literature Review: Study Background

2.1 INTRODUCTION

The purpose of this chapter is to provide the reader with an in-depth understanding of what hope is and to review how hope theory has developed since the 1950s up to the most recent developments that have influenced the conceptualisation of I-HOPE. I concur with Herth (2001, p. 1009) that "[t]he development of an intervention program designed to enhance hope must be based on an in-depth understanding of hope and hope-enhancing strategies identified through research" (Herth, 2001, p. 1009). In this chapter, I discuss foundational knowledge on hope, while Chapter 3 will focus on a review of existing hope-based interventions and I-HOPE.

This chapter commences with a historical overview of hope research with a view to contextualising the broad field of hope research in terms of past research endeavours, current research challenges, and future research possibilities. Hope is then positioned in the field of positive psychology in line with the ethos of this study. Brief reference is also made to hope in relation to other positive psychological constructs.

The next section of this chapter discusses hope as a theoretical construct and also considers the four channels of hope as proposed in the integrative hope theory of Scioli et al. (2011), the guiding theory of this study. A clear understanding of this theory requires the explanation and contextualisation of pre-existing views of hope. The spiritual, attachment, mastery, and survival motives that form the emotional channels of hope development as conceptualised in the integrative hope theory are discussed to demonstrate the reciprocal relationship between these motives. This chapter thus moves from a broad to a narrow review of the literature culminating in the guiding theory of the study. Chapter 3 will continue with the literature review but with the focus on applying the theory to I-HOPE.



2.2 POSITIONING HOPE IN THEORY

2.2.1 HISTORICAL OVERVIEW OF HOPE IN HOPE RESEARCH

Developments and advances in hope research have resulted in an increased awareness in various fields of study such as nursing, psychology, neurobiology, and psychiatry of the potential value and practical application of hope as a psychological construct in ameliorating emotional responses in patients (Herth, 2001; Larsen, & Stege, 2010a, 2010b; Richman et al., 2005; Snyder, & Lopez, 2002; Taylor, Dickerson, & Klein, 2002). The following timeline shows the historical developments in hope research over the past six and a half decades (see Figure 2.1 below).



1950s	 Hope studies in the late 1950s slowly became more formal. Psychiatrists such as Frank (1968) and Menninger (1959) believed that positive emotions played an important role in any form of healing (Snyder, 2000c). Hope research was met with scepticism as it was not objectively measurable and differed from the dominating positivist approach in Western medical research (Murray, & Chamberlain, 1999). More emphasis was placed on eradicating negative emotions, rather than on promoting positive emotions, because research at the time suggested that negative emotions related to poorer health (Snyder, 2000c). In 1959, Karl Menninger, President of the American Psychiatric Association, called for more research on hope in mental health literature. This call inspired Snyder to change the conceptualisation of hope as emotion based to cognition based(Menninger, 1959).
1960s	 Stotland (1969) became the first theorist in the field of psychology to conceptualise hope as goal directed. According to Snyder (2002c), this goal-directed perspective of hope was supported by researchers such as Cantril (1964), Farber (1968), and Frank (1968). The first scientific publication on hope from a nursing sciences perspective emerged in 1968 (Farran et al., 1995).
1970s	 Extensive hope-related psychological research was done on expectancies (beliefs towards a desired outcome), which included self-efficacy, motivation, social learning, and goal setting (Magaletta, & Olivier, 1999). Book publication: <i>Optimism: The Biology of Hope</i> viewed positive emotions as a natural capacity in human beings (Tiger, 1979 in Carr, 2011).
1980s	 According to Snyder (2000c), researchers from various disciplines, especially nursing and psychology, worked very much in isolation from each other to develop theories of hope. Miller's (1983) multidimensional hope theory. Dufault and Martocchio's (1985) multidimensional hope theory. The first scientific publication on hope from a psychiatric perspective emerged in 1988 (Farran et al., 1995).
1990s	 The development of hope scale measures in the literature to test people's hope levels in various contexts (Raleigh, 2012), including the Nowotny Hope Scale (Nowotny, 1989), the Adult Dispositional Hope Scale (Snyder et al., 1991), the Herth Hope Index (Herth, 1992), the State Hope Scale (Snyder et al., 1996), and the Hope Differential Scale (Nekolaichuk, Jevne, & Maguire, 1999). The Hope Foundation (University of Alberta, Canada) was founded to support hope research (currently supports research through Hope Studies Central). In 1998, Martin Seligman, President of the American Psychological Association, challenged psychological professionals to broaden their focus beyond human problems and pathology to include human strengths and wellbeing (Berridge, 2011).
2000s	 Positive psychology establishes itself as a prominent field in psychology (Pawelski, 2003). Increase in researchers exploring the application of hope through hope-based interventions in various nursing and psychological contexts (Duggleby et al., 2007; Herth, 2000, 2001; Rustøen et al., 1998; Snyder et al., 2005). Paper presented based on the integrative hope theory (Scioli, & Biller, 2003).
Since 2000s	 The integrative hope theory proposed for the field of psychology (Scioli, & Biller, 2010; Scioli et al., 2011). The potential value of the integrative hope theory in therapeutic interventions acknowledged (Howell et al., 2014; Scioli et al., 2011; Yohani, & Larsen, 2012). No hope-based interventions developed based on the integrative hope theory (Scioli et al., 2011).

Figure 2.1: Historical developments in hope research



The above timeline suggests that hope research developed in five waves or distinct research phases. The first wave appears to have been from 1950 to 1960. This wave or phase was characterised by a rising awareness of the importance of hope among some psychiatrists and of the role that positive emotions play in healing (Frank, 1968; French, 1952; Menninger, 1959). The second wave was from 1960 to 1980 when hope was conceptualised as a goal-directed (unidimensional) theoretical construct (Stotland, 1969). The third wave from 1980 to 1990 indicates an increase in hope research from a multidimensional perspective. Especially in the nursing field, various researchers have proposed theoretical models based on exploring hope in a cancer care context (Dufault, & Martocchio, 1985; Hinds, 1984; Hinds, & Martin, 1988; Miller, 1983; Owen, 1989). The fourth wave of hope research from 1990 to 2000 was characterised by an increase in the development of quantitative hope measures to explore hope (Herth, 1991, 1992; Snyder, Harris, et al., 1991; Snyder et al., 1997; Snyder et al., 1996). Wave five (2000 – ongoing) seems to be a period of research where the focus is on developing hope-fostering strategies (Buckley, & Herth, 2004; Larsen, & Stege, 2010a, 2010b) and exploring various hope-based interventions (Cutcliffe, 2004; Duggleby et al., 2007; Herth, 2000, 2001; Rustøen et al., 1998). These identified periods (waves) are not "set in stone" as individual research studies continuously kept challenging and contributing to hope theory. This natural "ebb and flow" of theory development can be considered a never-ending process as new evidence informs "old" research.

A specific period of interest for the present study was at the start of the new millennium when there was an increase in research on the application of hope through hope-based interventions in nursing and psychological contexts (Duggleby et al., 2007; Herth, 2000, 2001; Rustøen et al., 1998; Snyder et al., 2005). In the field of psychology, deficit-based research studies, such as those on depression and anxiety, by 2003 still dominated research output focused on psychological wellbeing (Linley, & Joseph, 2004). Snyder, Harris et al.'s (1991) hope theory strongly influenced psychological research and has been applied extensively in various contexts (Berg et al., 2008; Curry, & Snyder, 2000). Advances in the conceptualisation of hope in psychology have only recently been made with Scioli et al.'s (2011) view that hope can best be understood as an integrative emotional network. Their description of attachment, mastery, and survival as the biological foundations of hope in particular



adds to the neurobiological understanding of how positive emotions such as hope can influence the immune system (Richman et al., 2005).

Scioli and Biller (2003) described this integrative perspective more than a decade ago, yet this perspective only recently attracted increased interest after Snyder et al.'s (1991) theory was heavily criticised for not including a wider view on hope and how hope develops in people (Barilan, 2012; Bernard, 2010; Du, & King, 2013; Scioli et al., 2011). Researchers have recently also alluded to its potential application value in psychotherapy (Howell et al., 2014; Yohani, & Larsen, 2012). However, to date, no research studies have reported on the application of Scioli et al.'s (2011) theory in hope-based interventions.

Traditionally, psychology has focused on psychological deficits and disabilities in people, referred to by some as the deficit/needs-based approach or illness ideology (Maddux, 2002; O'Hara, 2013). However, increasing dissatisfaction with this worldview in psychology has led to the development of positive psychology (Carr, 2011). Positive psychology focuses on building on what is right rather than on fixing the problem (Compton, 2005; Seligman, 2002). In contrast to traditional psychology, positive psychology aims at taking people towards wellbeing and not just towards a neutral psychological point (Lees, 2009). Rooted in humanistic philosophy, positive psychology as branch of psychology emphasises happiness and fulfillment and endeavours to balance rather than disregard or replace traditional psychological ideas (Seligman, Steen, Park, & Peterson, 2005). Positive psychology is furthermore an inclusive term for the study of positive emotions and character traits in people (Seligman et al., 2005). Seligman (2002) describes hope as a positive future-directed emotion and as a constructive human trait that promotes wellbeing in people. Positive psychology consequently seeks to enhance protective factors and strengths such as hope in individuals (Steck, Abrams, & Phelps, 2004).

Although hope is related closely to other positive psychological constructs such as optimism, confidence, trust, and resilience, it has also been established in the literature as an independent construct with construct validity (Farran et al., 1995; Luthans, Avilio, Avery, & Norman, 2007 cited in Creamer et al., 2009; Magaletta, & Olivier, 1999). To narrow the scope of the present thesis, the related positive psychological constructs will not be discussed further. The following section reviews



the theoretical conceptualisation of hope in the literature considered relevant to this study.

2.2.2 INTERNATIONAL RESEARCH ON HOPE

As mentioned in the previous section, researchers from a variety of fields of study have explored hope as a construct (Bernardo, 2010; Cutcliffe, & Herth, 2002a, 2002b, 2002c; Du, & King, 2013; Dufault, & Martocchio, 1985; Duggleby et al., 2010; Herth, & Cutcliffe, 2002a, 2002b, 2002c; Lopez, Snyder, & Pedrotti, 2003; Maree, Maree, & Collins, 2008a; Nekolaichuk et al., 1999; Scioli et al., 2011; Shorey, Snyder, Rand, & Hockemeyer, 2002; Snyder, Rand, et al., 2002; Stephenson, 1991; Webb, 2007). This understandably resulted in diverse definitions of what hope is (the nature of hope) and what it is to hope (the theoretical understanding of hope) (Webb, 2007). Webb (2013) in a literature review on hope identified 26 theories of hope and 54 definitions of hope (see Appendix A for a summary of hope definitions). Although it is a lengthy and complex endeavour to consider all the different definitions of hope, it is nonetheless an important exercise that can be simplified by discussing hope in terms of two key conceptual perspectives, namely the cognitive-behavioural (goal-focused) perspective and the multidimensional perspective (Larsen et al., 2007; Larsen, & Stege, 2012). In line with Larsen et al. (2007) and Nekolaichuk et al. (1999), the cognitive-behavioural (goal-directed) perspective was dealt with in this study as a unidimensional understanding of hope.

2.2.2.1 Unidimensional understanding of hope

The unidimensional understanding of hope is based on the ideas of Stotland (1969) who emphasised the importance of hope in relation to expecting and achieving goals. He postulated that hope is a condition for action and proposed that the probability of reaching a goal will affect a person's anxiety levels and motivation through cognitive learning processes in which schemas are acquired behaviouristically after being rewarded for achieving them (Stotland, 1969). Snyder (1944-2006) expanded Stotland's theory by describing hope as a cognitive, goal-directed construct yet emphasising the importance of developing pathway thoughts as well as agency thoughts as two reciprocal, positively related components in the process of developing hope (Egan, 2014; Snyder, Harris, et al., 1991; Snyder, 2000c; Snyder, Rand, et al.,



2002. Pathway thoughts are based on discovering routes to desired goals, while agency thoughts constitute the motivational component of hope, propelling people forward on the chosen pathway(s) (Snyder, Rand, et al., 2002). As stated in the previous section, Snyder's unidimensional theory of hope has been used extensively in psychology, dominating research on hope and hope intervention (Scioli et al., 2011). Although this theory has been criticised for its unidimensional view of hope (Bernardo, 2010; Du, & King, 2013; Scioli et al., 2011), its contribution to understanding goal-directed hope has played an important role in understanding the process of how hope develops.

Of particular value is the theory's extensive description in the literature as a hope therapy (Cheavens, Feldman, Gum, et al., 2006; Cheavens, Feldman, Woodward, & Snyder, 2006). Hope therapy integrates cognitive behavioural therapy and brief solution-focused therapeutic practices with the principles of developing hope in people (Lopez, Floyd, et al., 2000; Lopez et al., 2004; Michael et al., 2000; Snyder et al., 2000). In such therapies, hope becomes the motivational agent for change (Lopez et al., 2004). In the development of mastery towards the realisation of goals, this theory can be used by therapists to help clients overcome obstacles in achieving hope. However, Snyder's theory on hope limits our understanding of hope development compared to multidimensional hope perspectives (Scioli et al., 2011). Snyder further sees hope development as self-determined (Western) and has been criticised for not acknowledging collectivistic hope development (Bernardo, 2010). From Snyder's perspective, the individual is in control of his or her own destiny through self-talk such as "I want to...", "I can do this," "I am not going to be stopped" (Snyder, Rand, et al., 2002, p. 251), and "I meet the goals I set for myself" (Snyder, LaPointe, Crowson, & Early, 1998, p. 810). Du and King (2013) concur with Bernardo (2010) by stating that the individualistic trait of hope as described in Snyder's hope theory is a myopic view of how hope should be understood, and they add that this individualistic assumption needs to be expanded by also considering the role resources outside the individual play in hope development.

It was noted in the literature review that the studies in psychology seldom questioned the unidimensional understanding of hope (Scioli et al., 2011) and that a multidimensional understanding of hope was more prevalent in the nursing sciences (Cutcliffe, & Herth, 2002a; Larsen et al., 2007; Snyder, Rand, et al., 2002).

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2.2.2.2 Multidimensional understanding of hope

As mentioned in Chapter 1, a multidimensional understanding of hope includes a broader perspective of what it means to hope as well as external contextual factors, thereby not limiting our understanding of hope to goal-directedness only. Larsen and Stege (2012) state that the multidimensional understanding of hope has its roots in the nursing sciences with many researchers in this field seeing hope as consisting of dimensions other than just goal-directedness (Dufault, & Martocchio, 1985; Hinds, 1984; Miller, 1983; Stephenson, 1991).

Miller (1983, 2007) defines hope as a state of being involving a confident expectation (anticipation) of an on-going good state or liberation from a difficult situation (entrapment). Miller and Powers (1988) identified various critical dimensions of hope that inform our understanding of hope such as mutuality and affiliation, having a sense of the possible, avoiding absolutising, anticipation, establishing and achieving goals, finding purpose and meaning, reality surveillance, and mental and physical activation. The authors placed special emphasis on the empathic relationship between therapist and client in the process of facilitating hope and exploring the achievement of goals. Miller (2007, p. 13) argues that "how hope is conceptualized underpins our view about appropriate strategies to use at varied stages in health and illness to inspire hope". This insight is echoed by Herth (2001).

Dufault and Martocchio (1985, p. 382) in a grounded theory research study define hope as a "multidimensional dynamic life force characterised by a confident yet uncertain expectation of achieving a future good which, to the hoping person is realistically possible and personally significant". According to the authors, hope consists of a generalised and particularised sphere within the contextual, affective, cognitive, behavioural, affiliative, and temporal dimensions.

Generalised hope refers to a broad, undetermined sense of a future beneficial development, while particularised hope refers to hope focused on achieving a specific outcome (goal) (O'Hara, 2013). The dimensions can be summarised as follows: the cognitive dimension includes a person's thinking and imaginary processes; the behavioural dimension focuses on action towards or away from an outcome, including psychological, physical, social, or spiritual actions; the affiliative dimension includes a



person's sense of relatedness beyond the self; the temporal dimension is associated with a person's sense of time regarding the ability to integrate the past and present into a future focus; and the contextual dimension focuses on circumstances surrounding a person that influence hope (Dufault, & Martocchio, 1985; O'Hara, 2013).

I found this wider perspective on hope appealing, yet I believe that Dufault and Martocchio's (1985) theory would have benefited by providing for a separate spiritual dimension as encountered in other hope theories (Farran et al., 1995; Nekolaichuk et al., 1999; Scioli et al., 2011). Despite the criticism that there is no evidence that the data in their study were representative of the general population (Cutcliffe, & Herth, 2002a), this theory has been extensively used as the conceptual basis for Herth's hope-measuring instruments (Herth, 1991, 1992, 2000).

The Herth hope model (Herth, 1989) combined Dufault and Martocchio's (1985) six hope dimensions in order to assess hope in a general nursing context. Herth's combinations were the cognitive-temporal, affective-behavioural, and affiliativecontextual dimensions. Similarities have been pointed out in research literature between the dimensions of this theory and those of Snyder's unidimensional theory. Weis and Speridakos (2011) see the cognitive-temporal dimension as similar to agency thinking and the affective-behavioural dimension to pathway thinking. This implies that Dufault and Martocchio's (1985) theory's uniqueness may lie more in its affiliative and contextual dimensions.

Several researchers have attempted to synthesise the numerous multidimensional understandings of hope in the fields of philosophy, theology, nursing, sociology, and psychology (Farran et al., 1995; Scioli et al., 2011; Webb, 2007). For example, in the nursing sciences, Stephenson (1991, p. 1459), in a seminal empirical review of 52 papers on hope, synthesised the definitions of hope in the nursing field, describing hope as "[a] process of anticipation that involves the interaction of thinking, acting, feeling and relating, and is directed towards a future fulfilment that is personally meaningful". Morse and Doberneck (1995) regarded these attributes of hope, as identified by Stephenson (1991), as being too abstract to use in developing hope in people. Despite this criticism, Larsen et al. (2007) still considered Stephenson's perspective on hope as including the conceptual understandings of Dufault and Martocchio (1985), of Farran et al. (1995), and even of Morse and Doberneck (1995).



According to Larsen et al. (2007) they all describe shared components such as embracing the dynamic nature of hope, emphasising hope as essential for purposeful living, being future oriented, comprising a goal orientation, and being personally significant. All these components are captured in Stephenson's (1991) definition of hope.

In an attempt to put forward a less abstract view of hope and how hope is developed, Morse and Doberneck (1995) proposed seven developmental components of hope including:

"A realistic initial assessment of the predicament or threat, the envisioning of alternatives and the setting of goals, a bracing for negative outcomes, a realistic assessment of personal resources and of external conditions and resources, the solicitation of mutually supportive relationships, the continuous evaluation for signs that reinforce the selected goals, and a determination to endure" (Morse, & Doberneck, 1995, p. 277).

I believe these developmental components of hope have value as they relate directly to appraising and reappraising a life stressor (such as major surgery).

Integrating the understanding of hope from various fields of study, Farran et al. (1995) and Farran et al. (1992) describe hope as a framework of four processes represented by the HOPE acronym: H – health (experiential attribute), O – other (relational attribute), P – purpose (attribute of personal meaning) and E – engage (attribute of rational engagement). In my opinion, the authors' understanding of hope is comprehensive and links up with the main features of Scioli et al.'s (2011) hope theory. This practical acronym may be of help to therapists. It can also be used in psychoeducational therapeutic contexts to raise people's awareness of hope resources. This theoretical framework, however, does not account for attachment and mastery (Scioli et al., 2011), which are important psychological constructs.

Nekolaichuk et al. (1999) view hope as a three-factored structure that includes a personal spirit, a situational dimension, and an authentic caring dimension. The personal spirit dimension includes features such as meaning making, caring, and engaging by patients; the situational dimension includes the confidence of a patient regarding the risk or challenge faced; and the dimension of authentic caring includes

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the credibility and comfort of the caring environment (Nekolaichuk et al., 1999). This theoretical model stems from joint research by researchers in educational psychology and oncology and has, in my opinion, made significant strides towards integrating our understanding of hope by extending the dimensions of hope beyond goal-directedness to include the other dimensions. A further valuable contribution of this theory is that it describes the meaning of hope as a connotative (personally subjective) and not as an objectively predetermined (defined) phenomenon as in other theories (Nekolaichuk et al., 1999).

Also in the nursing context, Hammer, Mogensen, and Hall (2009, p. 549) metasynthesised the concept of hope describing it on the basis of six destinctive metaphors: "living with hope (being dimension), hoping for something (doing dimension), hope as a light on the horizon (becoming dimension), hope as a humanto-human relationship (relational dimension), hope vs. hopelessness and fear (dialectic dimension) and lastly hope as weathering the storm (situational/dynamic dimension)." I found the descriptive methaphorical nature of this perspective appealing, especially because it can assist people to comprehend aspects of hope during psychoeducational intervention. In a therapeutic context, it may also hold value in linking their hope to personal methaphors where applicable. Credit should be given to the study's authors for including international studies in their meta-synthesis. However, as the researchers themselves pointed out, some of the reviewed studies lacked descriptive depth, and they were accordingly compelled to review research with varying methodologies in the synthesis (Hammer et al., 2009).

Webb (2007, 2013), also in a meta-synthesis of existing concepts of hope, describes various modes of hope. These modes are considered complementary to other modes identified in multidimensional hope research. They include patient hope – which is future directed and has full awareness that the journey towards the goal itself has meaning, while based on a sense that the world is good; critical hope – a future-oriented contradictory experience between what can be (promised) and what is (reality) as criticism of a person's current despair; sound hope – finding a mental picture of a short-term future goal; estimative hope – hope towards a goal that envisions hope mentally while at the same time estimating its probability; resolute hope – hope against any sound evidence; and, lastly, transformative (utopian) hope –



hope that insists on an outcome that is better than may be imagined, grounded in confidence and agency, embracing possibility (Webb, 2007, 2013).

Maree, Maree, and Collins (2008b) regard Webb's (2007) estimative hope, resolute hope, and utopian hope as being mere modes of goal-directed (unidimensional) hope. Resolute and utopian hope are also interpreted by some as false hope as they cannot be grounded in evidence. However, research has shown that so-called false hope may still contribute positively towards health, with the placebo effect perhaps the best example of such hope (Groopman, 2005). These modes of hope may all at times be part of the experience of hope in people and are based on personal worldviews. In my opinion, this understanding of hope can help therapists understand the nature of patients' hope, yet it may be too abstract to use in psychoeducational interventions with most patients.

Overlaps clearly exist between the various theoretical viewpoints on the nature of multidimensional hope theory (see Table 2.1).

Dimensions	Dufault and Martocchio (1985)	Duggleby et al. (2010)	Farran et al. (1995)	Miller (1983)	Scioli et al. (2011)	Stephenson (1991)
Cognitive/Reason		\checkmark	\checkmark	\checkmark		\checkmark
Affective/Emotion					\checkmark	\checkmark
Contextual					\checkmark	
Temporal/Time					\checkmark	
Affiliative/Attachment			\checkmark	\checkmark	\checkmark	
Behavioural (action)/Mastery	V			\checkmark	\checkmark	
Spiritual/Transcendent Purpose/Meaning	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Biological/Health			\checkmark		\checkmark	
Freedom			\checkmark		\checkmark	
Survival			\checkmark		\checkmark	

Table 2.1: Overlapping multidimensional views

The literature records various attempts to move towards a more integrative understanding of hope, often synthesising the understanding of hope from within fields

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such as nursing, psychiatry, psychology, philosophy, and theology (Farran et al., 1995; Farran et al., 1992; Hammer et al., 2009; Stephenson, 1991). As most of these studies were conducted in the field of nursing, they did not always address essential aspects of hope such as attachment, mastery, and survival from the perspective of developmental and health psychology.

2.2.3 NATIONAL RESEARCH ON HOPE

In the South African psychological context, the unidimensional understanding of hope has generally been used in the practice of hope (Pretorius, Venter, Temane, & Wissing, 2008). Limited research was found on the concept of hope, with only four such studies reported on between 1970 and 2006 (Coetzee, & Vivier, 2007). It should, however, be noted that research is currently being done on hope from the perspective of South African children made vulnerable through HIV&AIDS (A. Cherrington, personal communication, October 30, 2013).

During 2008, hope was explored amongst undergraduate students at the University of Pretoria in terms of goal achievement resulting in the development of a quantitative Hope Orientation Measure (HOME) (Maree, Maree, & Collins, 2008a, 2008b). This study identified five dimensions that played a role in an academic achievement context, namely goal achievement resources, ineffectuality, future vision, despondency, and agency (Maree et al., 2008b). Although the researchers relied mostly on Snyder's unidimensional understanding of hope, they also integrated Webb's (2007) wider perspective on hope, as discussed earlier. Their study also pointed out the importance of hope in a culturally diverse way, implying that a Westernised individualistic way of viewing hope may not always be best when working in the South African context (Maree et al., 2008b; Maree, & Maree, 2013).

The conceptual development of hope will not end as long as people continue to be fascinated by it, and although the understanding of hope has been the focus of different researchers with distinct differences in methodology and approaches (Barilan, 2012; Cutcliffe, & Herth, 2002a; Lopez et al., 2003; Morse, & Doberneck, 1995; Maree, & Maree, 2013; Snyder, 2002), there seems to be some agreement on the essential characteristics of hope. Hope is generally agreed to be future oriented and essential in the coping process, and even though some researchers seem to

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focus only on a unidimensional understanding of hope, it is nevertheless multidimensional in nature (Raleigh, 2012; Seligman, 2002).

2.3 THE INTEGRATIVE HOPE THEORY OF SCIOLI ET AL. (2011)

Scioli et al. (2011) view hope as an emotional network and base their theory on the bio-psychosocial understanding of hope development through a person's attachment, mastery, survival, and spiritual (also referred to as spirituality) needs or motives as channels of hope. In order to understand this theory's five-level structure, the four "channels of hope" are discussed below (Scioli, & Biller, 2009; Scioli et al., 2011). The five levels of hope build on each other, with level 1 described as the biological motives for or blueprints of hope; level 2 as the nature and nurture contributions to strengthen hope; level 3 covers hope traits in a person, also referred to as a person's hopeful core; level 4 includes a person's faith system; and level 5 consists of hope behaviours as products of a person's belief system (Scioli et al., 2011).

In psychology, these four motives are considered to have significant value in the developmental and coping processes of people (Bretherton, 1994; Scioli, & Biller, 2010; Walsh, 1984). Scioli et al. (2011) maintain that mastery, attachment, and survival constitute the biological foundations of hope and, together with a spiritual component, perhaps best encapsulate human nature from a psychological perspective.

2.3.1 HOPE AS ATTACHMENT MOTIVE

According to Scioli and Biller (2010), quality relationship building and its maintenance are crucial in developing hope. In simple terms, developing hope through attachment can be seen as a person's perception of social support or social connection (sociability) (Scioli, & Biller, 2009; Scioli et al., 2011). Attachment theorists view the secure attachment that a child forms with his or her caregiver in the first years as a key factor in healthy human development that lays the foundation for hope (biological blueprint of hope) (Ainsworth, & Bowlby, 1991; Scioli, & Biller, 2003). At the same time, research evidence points to the importance of attachment continuity across the life span of a person (Bretherton, 1994; Wenar, & Kerig, 2005). Hope development through the need for attachment is therefore not confined to early childhood



experiences but can also be developed by seeking out people offering kindness and companionship (a nurturing relationship) in later life (Scioli, & Biller, 2009, 2010).

Scioli and Biller (2010) highlight two important aspects of the attachment relationship, namely trust and openness, that influence hope development. These two factors are integral parts of a therapeutic relationship and are therefore crucial for the success of any psychotherapeutic hope-based intervention. Hope from an integrative theory perspective may therefore be facilitated or developed during an intervention by a therapist when engaging in a trusting and open therapeutic relationship with a client and by motivating the client to foster existing relationships in his or her life. Such a therapeutic relationship may promote a mediated hope that is socially constructed (Scioli, & Biller, 2003, 2009).

2.3.2 HOPE AS A SPIRITUAL MOTIVE

Scioli and Biller (2010) link hope development to strong emotionally charged beliefs on a spiritual level. Spirituality may include philosophical, cultural, and religious beliefs. Hope is an integral part of people's personal and cultural expression as its understanding is rooted in people's belief systems, determining their life philosophy (Warren, 2015). In endeavouring to understand the world they live in, people attempt to address fundamental questions of their existence such as: Who am I?; How did I get here?; What am I here for?; What is the meaning and the purpose of life, if any? Where am I going in all of this? (Dvorsky, 2012; Sepetjian, 2011). In trying to answer these questions or in not doing so, people reveal their personal belief systems expressed in philosophical and/or religious faith-based assumptions or theories about the world. People's perception of hope is influenced directly by such questions.

Fromm (1968), as quoted by Farran et al. (1995, p. 7), claims that "faith cannot be sustained without hope, and hope has no base without faith", thus making them interdependent concepts. Philosophers as well as theologians emphasise the link between faith and hope. Faith is seen as ultimate beliefs about the truth evoked by a sense of awe in connectivity with God, the holy, divine, or transcendent force, as expressed through religious and spiritual activities and often found in cultural practices (Baumgardner, & Crothers, 2010).



Generalising the role of hope in various cultural groups, Cutcliffe and Herth (2002a) speculated that for the Chinese, for example, with their strong sense of optimism, hope has an expressive value. In the Indian culture, although also not explicitly referring to hope in their literature, hope is seen as a part of the meaning-making process and an act of survival with links to more than one channel of hope (Cutcliffe, & Herth, 2002a).

Western culture is influenced by the ancient Greek culture, with its strong sense of the duality between mind and body, and a belief that reason is dominant in the psyche of man. Hope is consequently largely underexplored and perhaps considered not part of the cognitive process (Cutcliffe, & Herth, 2002a). According to O'Hara (2013), the ancient Greeks laid great stress on temperance, prudence, courage, and justice as virtues, paying little attention to hope. Greek mythology describes hope as an evil from Pandora's Box (Snyder, 2000b). The influences of these beliefs are still evident in Western medical research today.

In expressing of their hope beliefs, sceptical philosophers such as Sophocles, Nietzche, Euripedes, Francis Bacon, and even Benjamin Franklin echoed these views, warning against the foolishness of hope (Snyder, 2000a). Contradictory thoughts about hope can be seen in existential philosophy. The philosophers Marcel and Kierkegaard considered hope vital to the human soul and the essence of its existence (Cutcliffe, & Herth, 2002a). The pivotal question framing the views of existentialist philosophers on hope relates to the fundamental reflection on the final destiny of man and the consideration of death (Cutcliffe, & Herth, 2002a). For those who consider death as final with no belief in an afterlife, hope cannot be transcendental in nature. Spiritual beliefs therefore have a direct influence on hope development in people.

While some people would reject the possibility of hope for the atheist, Scioli and Biller (2009) refer to the non-negotiability of hope claiming that even atheists find themselves on the continuum of hope development. According to them, cultivating atheistic hope calls for a view on hope that allows for degrees of freedom concerning its rationalisation and expression in a personal belief system that can incorporate atheism (Scioli, & Biller, 2009). Atheistic hope may consequently be more goal directed and less transcendent in nature.



When commenting on hope's relationship to religion, it needs to be pointed out that there is still a great need for research in this field as the majority of existing scientific studies have been done within the protestant and catholic denominations of the Christian faith (Baumgardner, & Crothers, 2010). The faiths of the African Ifa, Australian Aborigines, Buddhists, Christians, Hindus, Islamists, Jews, and Native Americans all draw their spiritual energy from hope-oriented beliefs (Scioli, 2007; Scioli et al., 2011). Although not always overtly stated, in Buddhism, hope is determined largely by the individual and his or her moral choices as an active dimension of karma and by how time is prioritised in terms of the present focus (O'Hara, 2013). As hope in this study was focused primarily towards the future, it may have less relevance in the Buddhist tradition.

With hope being channelled through the spiritual system, it follows that religion and spirituality were pointed out by Scioli and Biller (2010) as having a consistent positive relationship with measures of health and wellbeing. It was also found that on average, religious people were happier and more satisfied with life than non-religious people (Baumgardner, & Crothers, 2010) and that regular church attendees showed lower mortality rates after factoring out the usual survival predictors (Strawbridge, Cohen, Shema, & Kaplan, 1997 in Baumgardner, & Crothers, 2010). Similarly, a study by Laird (1992), cited in Rand and Cheavens (2009), found prayer to be beneficial for coping with pain in patients with arthritis.

In the Judeo-Christian tradition, hope plays a central role as one of the triad of virtues along with faith and charity (love) (O'Hara, 2013; Snyder, 2000d). For the Christian, hope is a life in the presence of God (Cutcliffe, & Herth, 2002a). Thomas Aquinas (theologian and philosopher, 1225-1274) argued that we hope only for what we desire, yet he distinguished hope from desires and wishes by insisting that hope must fulfil the following four conditions: hope must be for something good, hope must be oriented towards the future, the goal of hope must be demanding, and the goal of hope must be possible (O'Hara, 2013), thereby excluding both resolute and euphoric hope (Webb, 2007).

Hope is linked clearly to the Christian faith in the Biblical definition of faith in Hebrews 11 verse 1, portraying faith as the substance of things hoped for and the evidence of things not yet seen (Nelson, 1994). O'Hara (2013, p. 28) summarises the Christian

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perspective of hope as: "Hope is based on the promises of God." It is a symbolic promise of what is possible, including an eternal future. Hope in this perspective offers a linear view of the past while drawing believers towards a better future. It also creates tension between what is and what can be as found in critical hope (Webb, 2007).

Scioli and Biller (2009) analysed the sacred texts, myths, and folktales of various spiritual beliefs including Australian Aborigine beliefs, Buddhism, Christianity, Hinduism, Ifa, Islam, Judaism, and Native American beliefs and found some level of hope-related passages in all of these texts. It can be argued that hope is in a way the essence of faith and a vital factor in coping with health problems, which are more likely to form part of the aging person's development stage (Raleigh, 2012). Spiritual beliefs are influential in determining people's outlook on the meaning of adverse experiences (Walsh, 2009).

2.3.3 HOPE AS MASTERY MOTIVE

Mastery is closely connected with a person's goals (Scioli, & Biller, 2010), yet it is more than goal achievement – Scioli et al. (2011) refer to it as a person's perceived control. Mastery, like attachment, is fundamentally rooted in human development as children achieve a sense of mastery through their ability to regulate their environment and experiences of success or failure (Wenar, & Kerig, 2005). Hope accordingly develops in tandem with a person's ability to self-regulate and is influenced by his or her ability to engage with the environment (Scioli, & Biller, 2009).

Empirical evidence supports a model for goal achievement where a person either approaches or avoids mastery (Belenky, & Nokes-Malach, 2012). As the willingness to engage with the world is linked directly to mastery motivation, the therapist can be a source of motivation in the mastery process (Wenar, & Kerig, 2005). Scioli and Biller (2009) maintain that mastery of a skill can be transferred through the correct guidance. This implies that the skill of hope can be mastered by clients if the therapist creates an environment of support towards goal achievement (Scioli, & Biller, 2010).



2.3.4 HOPE AS SURVIVAL MOTIVE

The psychiatrist and Holocaust-survivor Victor Frankl (1905-1997) is one of the bestknown behavioural scientists to record the intimate relationship between hopeful beliefs and human survival (Farran et al., 1995). Scioli et al. (2011) view survival as closely related to a person's need to cope in an adverse situation, self-regulate, and experience liberation. Hope is described in the literature as an antecedent to coping with a threat for survival (Dufault, & Martocchio, 1985; Owen, 1989) and survival is called one of the biological blueprints of hope by Scioli et al. (2011). The will to survive is seen as a basic human instinct associated with the experience of perceived threats, which can be encountered on many levels and in many different forms.

A basic understanding of neurobiology is needed in order to understand the biology of survival and how it is linked to hope. The nervous system is divided into two main networks that work together in harmony. These networks are the central nervous system (CNS), which includes the brain and spinal cord, and the peripheral nervous system, which includes the autonomic nervous system (ANS) and the somatic nervous system (Rodham, 2010; Straub, 2012). The ANS can be further divided into the sympathetic nervous system (SNS) and the parasympathetic nervous system (PNS).

A person's senses relay messages through sensory neurons in the somatic nervous system to announce a threat (stressor). The reticular formation plays a central role in altering the brain in response to such a threat by relaying information through two neural pathways (Rodham, 2010; Straub, 2012). In the first pathway, information about the threat is relayed to the thalamus (sorting the sensory information), which sends it through to the hypothalamus, the limbic system, and higher regions of the cerebral cortex that interpret the meaning of the stressor. In the second pathway, the reticular formation transfers neural instructions from the cerebral cortex to specific organs, muscles, and glands (endocrine system) controlled by the SNS as defence against the threat (Rodham, 2010; Straub, 2012).

An immediate survival response to a threat is made possible by a complex network of signals between the CNS, the endocrine system, and the immune system (Broadbent, & Loft, 2010). Under instruction of the SNS, the adrenal glands release hormones that trigger the well known "fight-or-flight" response (Straub, 2012). Activated by the ANS,

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this system is also known as the sympathetic adrenal medullary system (SAM) that enables an instant response to a threat (Broadbent, & Loft, 2010). Several minutes after activating the SAM, the hypothalamic-pituitary-adrenal axis (HPA) is activated to provide additional energy resources (Broadbent, & Loft, 2010). The HPA triggers what is called the delay response, which aims at restoring the body to homeostasis (Straub, 2012).

Apart from this immediate survival response, the body's immune system works on a continuous basis to eliminate foreign matter (such as germs or bacteria) in our bodies (antigens) (Broadbent, & Loft, 2010). According to Broadbent and Loft (2010), the immune system has a natural (inate) and specific (acquired) immune response. The natural immune system responds within hours using all-purpose cells, while the specific immunity response can take several days as the body develops antibodies (B-lymphocytes), T-helper cells (T-cytokines), and T-destroy cells (T-cytotoxic) as in the case of chronic infections (Broadbent, & Loft, 2010).

Developments in neurobiological research suggest that positive emotions may activate these helper cells and thereby support the immune system (Groopman, 2005). Positive emotions have also been associated with an increase in dopamine (neurotransmitter associated with the pleasure sensation) levels, and stimulating cognitive flexibility and creativity in people (Ashby, Isen, & Turken, 1999; Zillmer, Spiers, & Culbertson, 2008). Models of emotion and health suggest that psychological effects may influence factors such as heart stability, chronic sympathetic nervous system activation, catecholamine release, dysregulation of the hypothalamic-pituitary-adrenal axis, serotonergic dysregulation, and endothelial dysfuncion (Richman et al., 2005). The survival need is therefore important in developing hope, and hope is in turn supportive of human survival.

According to Gottschalk, Fronczek, and Buchsbaum (1993), hope and hopelessness are useful constructs that need to be examined in patients in order to predict the developmental trajectory of a disease. This is because positive emotions, especially those that hold an element of expectation such as hope, are associated with the activation of various regions of the limbic system in order to protect the body (set of brain structures involved in the activation of emotional behaviour) (Burgdorf, & Panksepp, 2006; Zillmer et al., 2008). Recognising that hope is an emotional network



(Scioli et al., 2011) and that the brain through the limbic system is directly influenced by emotions (Ayers, & De Visser, 2011), it stands to reason that an intervention influencing emotions (hope) will also affect the neurobiological survival processes related to hope and coping with illness.

2.4 CONCLUSION

The review of research developments in the field of hope indicated a move towards considering hope as a multidimensional construct, and future research including the present study has the responsibility to continue building on these advances. In psychology, there is a particular need to promote theories that consider hope from a multidimensional perspective and, even more important, to develop hope-based interventions based on multidimensional or integrated views of hope.

This study endeavoured to address the gaps in the research that emerged from the literature review. The review highlighted gaps in psychological research in particular. In contrast to research in the field of nursing sciences, hope research in the field of psychology in the past was based largely on Snyder's cognitive, goal-directed unidimensional perspective. However, a theory that has emerged more recently in psychology is Scioli et al.'s (2011) integrative hope theory. Despite the progress that has been made in developing this theory and the potential value it holds for hope-based psychological interventions, no attempt has been made to describe such an intervention. The present study attempted to address this gap in the literature and also to contribute to research in the field of hope and psychology in South Africa where hope research has been extremely limited.

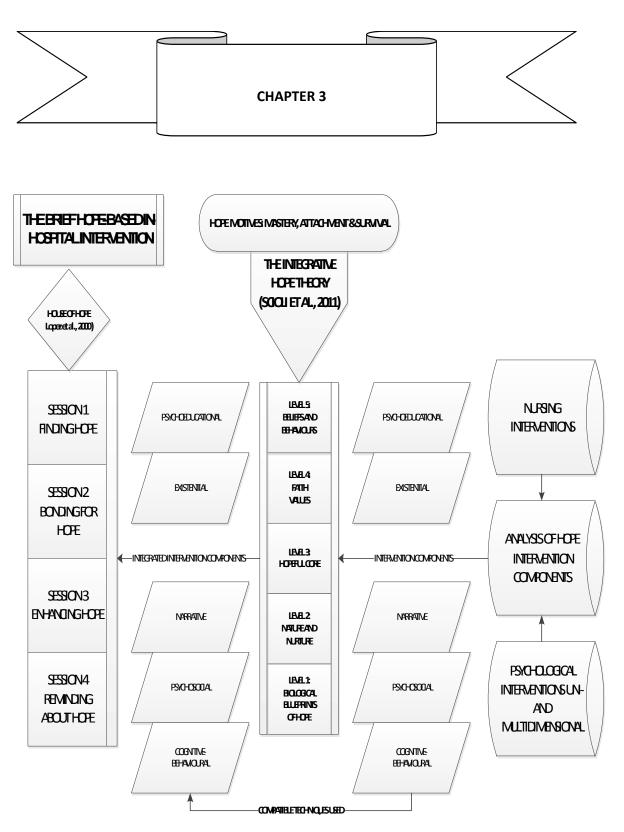
By providing a historical overview of hope in this chapter and considering the various waves or phases in hope research, this study endeavoured to build on Scioli et al.'s (2011) integrative hope theory and, more specifically, to advance research on hope-based interventions based on this theory.



Against the background of the emotional challenges experienced by TKR patients described in Chapter 1, interventions aimed at fostering the positive emotion of hope in these patients could be very beneficial (Gable, & Haidt, 2005; Salmon, & Hall, 2001; Taylor, 2011). The next chapter will focus on the applications of the integrative hope theory while also considering existing hope strategies that have been found to be effective in various other fields of study such as the nursing sciences. The chapter will end with a description of I-HOPE in this study.

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Chapter 3 A Brief Hope-based In-hospital Intervention "I-HOPE"

3.1 INTRODUCTION

Chapter 2 provided an overview of the hope literature that informed I-HOPE of this study. This chapter focuses on what I described in Chapter 2 as the fifth wave of hope research aimed at developing hope interventions based on a specific theoretical understanding of hope. I start this chapter by providing some insight into existing research on hope-based interventions used to inspire and increase hope in people in a medical context.

The need for well-defined intervention studies is well documented in hope literature (Herth, 2005; O'Hara, 2013). As stated in Chapter 1, hope-based interventions are interventions based on unique theoretical understandings of hope aimed at enhancing or securing (maintaining) hope in people. Hope-based intervention programmes have evolved in recent years after the implementation of hope intervention strategies in various contexts (Duggleby et al., 2007; Herth, 2001; Howell et al., 2014). There is ample research evidence that hope has a profoundly positive impact on academic performance (Snyder, Feldman, et al., 2002; Snyder, Cheavens, & Michael, 1999 in Snyder, Rand, et al., 2002), problem solving (Snyder, Harris, et al., 1991), sports performance (Curry, & Snyder, 2000; Curry, Snyder, Cook, Ruby, & Rehm, 1997), pain tollerance (Berg et al., 2008), and the ability to cope with and recover from health problems (Snyder et al., 2000 cited in Snyder, Feldman, et al., 2002; Taylor, 2000).

Despite the role of hope in these various contexts, the next section focuses on hope interventions only in the medical context apart from pointing out that some brief hope-based interventions have also been carried out on student samples (Berg et al., 2008; Feldman, & Dreher, 2012). The literature review also reports only on studies that were influential in conceptualising I-HOPE of this study, which took place during 2014. Any hope-based intervention research published after this date will be considered retrospectively in a later chapter of this thesis.



Hope-based interventions in medical contexts were devised based on hope theory and on hope enhancement techniques as pointed out in qualitative research studies (Herth, 2000). These interventions will be discussed in an integrated way to provide a more comprehensive perspective of their relevance to this study.

After discussing existing hope-based interventions, I will place the study's intervention design in a psychology framework based on the guidelines for health-promoting preventative interventions (Ayers, & De Visser, 2011; Westmaas, Gil-Rivas, & Silver, 2007). Following this, I will indicate how the integrative theory (Scioli et al., 2011) relates to existing hope-based interventions so that readers can understand my choices during the development of I-HOPE of this study, which is then itself described.

3.2 EXISTING HOPE-BASED INTERVENTIONS IN A MEDICAL CONTEXT

The call for an evidence-based practice has echoed across various fields of study, and it is especially in delivering health care services, where practitioners have to meet best practice standards, that research evidence is extremely valuable (Lovelock, Mathews, & Murphy, 2010). Research publications are resources for practitioners and researchers alike to identify interventions that will provide maximum benefit while at the same time minimise harm. There are various ways of assessing the potential value of existing interventions, such as systematic literature reviews, comparative studies, and randomised and non-randomised control trials (Lovelock et al., 2010). In this study, I opted for a systematic literature review of existing evidence-based interventions on which I based I-HOPE. The following section reviews these interventions with a view to identifying and evaluating interventions that have been used successfully in medical contexts. Based on this review, I will select certain techniques from these interventions to demonstrate how they are in line with Scioli et al.'s (2011) theory and therefore also with I-HOPE.

A comprehensive review of the PsychINFO, ProQuest and MEDLINE databases revealed that research on hope-based interventions in a medical context have been done largely in the fields of the nursing sciences and psychology. In the following section, I discuss the interventions in these two fields under separate headings and then reflect on the application value of some of the existing techniques for I-HOPE.



3.2.1 HOPE-BASED NURSING INTERVENTIONS

Research in the nursing sciences has contributed significantly to the development of hope-fostering interventions suitable for application in medical contexts (Cutcliffe, 1995; Herth, 1990b; Morse, & Doberneck, 1995; Penrod, & Morse, 1997). Hope interventions in this field have been applied mainly in oncology, gerontology, bereavement, and palliative care (Cutcliffe, & Herth, 2002c; Herth, & Cutcliffe, 2002a, 2002b).

Rustøen et al. (1998) researched one of the first nursing hope interventions, HOPE-IN, with the help of an experimental research design. This group intervention was based on Nowotny's (1989) six dimensions of hope, namely confidence in the outcome, relationships with others, future possibilities, spiritual beliefs, active involvement and hope from within (Nowotny, 1986 in Rustøen, & Hanestad, 1989). Rustøen et al.'s (1998) intervention targeted newly diagnosed cancer outpatients with the aim of increasing their hope and thereby improving their coping and emotional responses (Rustøen et al., 1998). The intervention groups consisted of seven to ten patients who received the intervention for eight two-hour sessions over an eight-week period. Rustøen and Hanestad (1998) later also reported on this intervention strategies that had been incorporated into their psychoeducational intervention sessions.

The intervention sessions reported by Rustøen and Hanestad (1998) had various therapeutic goals including strengthening the patients' belief in themselves and mastering their feelings about the future. This was achieved by helping the patients compare their personal narratives with those of other patients. The patients were also made aware of their emotional reaction to their diagnosis of cancer and were assisted in describing their feelings about cancer treatment. The therapist normalised these feelings and assisted the patients to relax through deep breathing, visualisation, and music activities. Further sessions focused on making the patients aware of their relational networks, strengths, and weaknesses. This was done by teaching them about supportive resources. The patients were actively involved by assisting them with goal setting and reflecting on spiritual beliefs and values to create a sense of meaning and purpose. They were motivated by strengthening their expectations of a future



positive outcome by encouraging them to focus on sources of support (Rustøen, & Hanestad, 1998).

The patients who took part in the HOPE-IN programme reported increased hope as well as decreased psychological distress. This outcome endured even when they were assessed at three and 12-month intervals after the programme (Rustøen et al., 2011).

Herth (1990b) identified various hope-fostering categories among terminally ill and older adult populations (Buckley, & Herth, 2004; Herth, 1990a, 1990b, 2005). These categories included fostering a sense of connectedness with the self, others, and the world; attending to the patients' goals (refining/redefining/refocusing them); affirming their worth; acknowledging and respecting spiritual beliefs and practices; promoting uplifting memories (building bridges from hope in the past to hope for the present and towards the future); using cognitive strategies such as narratives and cognitive reframing (cognitive-behavioural approach); using hope objects or images; considering time in relation to being busy with what they valued; and, lastly, using lightheartedness (humour) (Herth, 1990b, 2005).

In 2000, Herth explored a hope-based intervention involving 38 adults with recurring cancer by means of a quasi-experimental research design. The intervention was based on the hope process framework of Farran et al. (1995). It was mentioned in Chapter 2 that Farran et al. (1995) had proposed a framework for guiding hope-based nursing interventions built on four hope attributes, namely the experiential process, the relational process, the rational-thought process, and the spiritual/transcending process.

Herth (2001) described this small group intervention as interactive, and she accentuated the importance of listening to the patients' stories. Important aspects of the intervention were building a sense of community, searching for hope by discussing its meaning (also in relation to hopelessness), and the threats to hope and its protective quality (hope mantel). The sessions were structured to cover all aspects of Farran et al.'s (1995) framework and involved various creative hope-fostering techniques (activities) such as keeping a hope journal, developing a hope energy saver's basket, discussing hope pictures, goal redefining, and developing a joy collage (Herth, 2001).



Herth's intervention consisted of two-hour sessions on a weekly basis over an eightweek period, and the outcomes of the sessions were quantitatively measured. The results of this study indicated that hope was sustained after the intervention, when measured at 3, 6, and 9 months.

The Living with Hope (LWHP) programme of Duggleby et al. (2007) is a psychosocial hope intervention for palliative care patients based on the transforming hope theory of Duggleby and Wright (2005). This theory proposes a dynamic understanding of the nature of hope and the assumption that hope can be changed through conscious decisions (Duggleby, & Wright, 2005). Hope is therefore influenced by a meaningmaking process facilitated through symptom control, supportive relationships, and spirituality (Duggleby, & Wright, 2005). Duggleby et al.'s (2007, p. 249) individually applied intervention made use of the "Living with Hope" film before the patients chose one of three self-administered activities, namely "write to someone", or "begin a hope collection", or "begin an about me collection". It is noteworthy that the researchers in this study suggested that the duration of the intervention seemed to be less important than the process of the intervention itself. The intervention took place within a oneweek period, and hope development was evaluated using a mixed-methods approach, measuring hope levels quantitatively as well as exploring them qualitatively by putting two questions to the patients, namely whether they thought working on the activity of choice changed their hope, and why this was their specific opinion (Duggleby et al., 2007). Although the patients could elaborate on their answers, the question arises as to whether they might not have benefited more had there been a more extensive set of questions about the intervention.

In 2013, Duggleby et al. also used the LWHP programme with rural women who had advanced cancer and qualitatively evaluated the intervention by analysing the hope embedded in the hope narratives of the patients during the intervention. The findings indicated that the patients were able to find hope in their experiences of dealing with their disease. The analysis of the patients' hope narratives by Duggleby et al. (2013) focused on exploring the development of their hope and not just their experiences of the hope intervention. This intervention can be seen as creative and expressive, yet limited contact was reported between the patients and a trained professional. In my opinion, the intervention could have benefited from the greater involvement of a



professional trained in the application of implicit and explicit hope intervention techniques.

Other hope interventions include those of Kim et al. (2008) and Shin and Park (2007) who administered a hope-based intervention to home-based cancer patients in Korea. These interventions focused on positive self-identity formation, hope objective setting, therapeutic relationships, and spiritual/transcendental development. As with many intervention studies, these two Korean studies reported quantitative data results obtained from rating scales to validate the hope intervention. However, as mentioned earlier, rating scales are based on the conceptual understanding of the researchers or professionals involved, which may limit our ablity to judge interventions from an insider's perspective (Black, & Jenkinson, 2009; Woolhead et al., 2005).

Table 3.1 shows some of the most important nursing interventions and the techniques/activities that had application potential for the hope-based intervention of this study.

Author (date), research field	Intervention context "Name"	Intervention structure and techniques/activities	Description
Rustøen and Hanestad (1998).	Nursing: Oncology	 Cognitive / Affective / Behavioural techniques Structured education Introduction Belief in self and own ability Emotional reactions Relationship with family Own network awareness Active involvement in own life Spiritual beliefs and values Acknowledgement that there is a future Conclusion and evaluatio 	Descriptive
Rustøen et al. (1998)	Nursing: Newly diagnosed cancer patients "HOPE-IN"	 Cognitive/Affective/Behavioural techniques Structured education Introduction Belief in self and own ability Emotional reactions Relationship with family Own network awareness 	Outpatients: Group Mixed-method evaluation

Table 3.1: Hope-based nursing interventions



*Herth (2000)	Nursing: Hope intervention – patients with recurrence of cancer – 38 patients with recurrence of cancer	 Active involvement in own life Spiritual beliefs and values Acknowledgement that there is a future Conclusion and evaluation Narrative Building a sense of community Searching for hope (experiential) Connecting with others (relational – identify current support) Expand boundaries (spiritual/transcendent) Building the hopeful veneer (shielding activity) 	Outpatients: Small groups Quantitative evaluation
		 (Rational thought process) Reflecting and evaluation (Cognitive, psychoeducational, and supportive) 	
*Herth (2001)	Nursing: Hope Intervention Programme (HIP) – 38 patients with recurrence of cancer	 Story telling – bringing purpose and meaning (relational) Building a sense of community Searching for hope (experiential) Connecting with others (relational – identify current support) Expand boundaries (spiritual/transcendent) Building the hopeful veneer (shielding activity) (Rational Thought process) Reflecting and evaluation 	Outpatients: Small groups Qualitative evaluation
Duggleby et al. (2007)	Nursing: Palliative care patients "Living with Hope programme (LWHP)"	 Video Activities (letter writing, hope collection, about me collection) Self-administered Cognitive reframing and psychoeducation 	Mixed- methods evaluation
Shin and Park (2007)	Nursing: Cancer	Hope objective setting, positive self-identity formation, therapeutic relationships, spiritual, & transcendental process improvement, positive environmental formation and hope evaluation	Quantitative
Kim et al. (2008)	Nursing: Cancer	Hope objective setting, positive self-identity formation, therapeutic relationships, spiritual, & transcendental process improvement, positive environmental formation and hope evaluation	Quantitative
Rustøen et al. (2011)	Nursing: Cancer "HOPE-IN"	 Cognitive/Affective/Behavioural techniques Structured education Introduction Belief in self and own ability Emotional reactions 	Group intervention Mixed methods



		 Relationship with family Own network awareness Active involvement in own life Spiritual beliefs and values Acknowledgement that there is a future Conclusion and evaluation 	
Duggleby et al. (2013)	Nursing: Palliative care patients "Living with Hope programme (LWHP)"	 Video Activities (letter writing, hope collection, about me collection) Self-administered (Cognitive reframing through psychoeducation) 	Mixed methods

* Same intervention, separate reports of qualitative and quantitative data.

Most of the nursing interventions reviewed by me consisted of five or more weekly sessions. Several of the interventions had strong psychoeducational and cognitivebehavioural components and were based on a broader multidimensional understanding of hope. The application value of the interventions was reported on using mainly quantitative measures to indicate their effectiveness in raising hope. Although some of the interventions were descriptive in nature, yielding qualitative patient feedback (Duggleby et al., 2007; Herth, 2001; Rustøen, & Hanestad, 1998) I found limited exploration of patient experiences through in-depth interviews.

Moore et al.'s (2014) study was the only study found that qualitatively explored patient experiences of a hope-focused intervention and did not include quantitative assessment strategies. Their intervention consisted of group discussions based on the book *Finding Hope: Ways to See Life in a Brighter Light* (Moore et al., 2014, p. 3), which had a multidimensional perspective on hope and included practical ways to build hope into everyday life (Jevne, & Miller, 1999). The intervention also included discussions on hope as a concept, identifying signs and voices of hope, exploring hope experiences from the past, borrowing or sharing hope, learning to adapt, making small differences (being active), and making hope more visible ("celebrating hope") (Moore et al., 2014, p. 4). An important finding of the study among older individuals was that one is "never too old to hope" (Moore et al., 2014, p. 1). Although Moore et al. (2014) included assumptions on hope in their intervention and referenced it to the hope-fostering strategies suggested by Duggleby (2005), the intervention was not based on a specific theoretical perspective. A further challenge in the study was that



the researchers had an existing relationship with the participants, which might have had implications for their role as researchers (Moore et al., 2014).

The interventions discussed in this section, although from a nursing perspective, have application value for the present study because they were designed and applied in a medical context and were based on a specific hope theory considered relevant for this study. The following techniques were identified from these nursing interventions, which are in line with Scioli et al.'s (2011) hope theory and also with I-HOPE of this study.

Broad intervention approach	Technique/Activity
Cognitive-behavioural	Cognitive reframing
	Psychoeducation
	Goal setting
Emotion based/Motivational	Belief in own ability
	Acknowledging hopelessness
Affiliative	Social network awareness
	Therapeutic relationship building
	Building sense of community
Spiritual	Value-centred counselling
	Purpose exploration
	Expanding boundaries
Narrative	Hope film
	Relating to hope stories
	Story telling
Expressive activities	Artistic expression
	Writing activity

Table 3.2: Intervention strategies and techniques from the nursing
(multidimensional) field

3.2.2 **PSYCHOLOGICAL INTERVENTIONS**

Although psychological literature embraces the use of hope in a medical context, few hope-based interventions have been described in such a context. Hope-based interventions have most often been described in non-medical contexts such as academic, community, or intervention room environments (Cheavens, Feldman, Gum,



et al., 2006; Feldman, & Dreher, 2012; Marques, Lopez, & Pais-Ribeiro, 2011; Pretorius et al., 2008). Health psychology, as such, has for some time been very accommodative of a medical deficit way of viewing people, and slow to embrace positive psychological preventative or curative treatments such as hope intervention in medical contexts (Marks, Murray, Evans, & Estacio, 2011; Murray, & Chamberlain, 1999).

3.2.2.1 Unidimensional psychological interventions

As stated in Chapter 2, the unidimensional understanding of hope has dominated research on hope in psychology for decades. Various scholars in the field of psychology have focused attention on the application value of Snyder, Irving, and Anderson's (1991) hope theory in medical contexts (Barnum, Snyder, Rapoff, Mani, & Thompson, 1998; Elliot, Witty, Herrick, & Hoffman, 1991; Lopez et al., 2004; Taylor et al., 2000). The focus in psychological intervention studies was often not on hope theory as much as it was on determining if existing psychotherapeutic techniques could influence hope in patients (Irving et al., 2004; McDowell, 2008; Weis, & Ash, 2009). Few interventions based on Snyder's hope theory are described in the literature where the unidimensional understanding of hope is applied in a medical context. These types of interventions are at times referred to as goal-focused therapies (Klausner et al., 1998). Examples of such psychological hope interventions are those of Ho et al. (2012), Kashani et al. (2014), and Klausner et al. (1998).

The way in which hope-based interventions based on Snyder's (unidimensional) theoretical model are usually delivered are summarised by Weis and Speridakos (2011) as follows: The therapist first of all educates the patient on hope theory (learning process) and then assists the patient in formulating meaningful goals. Next, they together identify multiple pathways to the goals, break the goals into smaller sub-goals, identify stumbling blocks in the path of these goals, explore alternative pathways to the goals explored, and, finally, establish agentic thinking (goal motivation) through hopeful narratives. This intervention perspective, called hope therapy, was structured by Lopez, Floyed, et al. (2000) on the metaphor of building a house of hope.



Klausner et al. (1998) conducted structured group therapeutic sessions with clinically depressed patients, based on Snyder, Harris, et al.'s (1991) theory. These groups met for one hour a week over an 11-week period. The sessions included psychoeducation, individualised goal development, relaxation skills, cognitive restructuring, and problem solving. Based on the results from the State Hope Scale (Snyder et al., 1996), the patients' hopefulness was improved by this intervention (Klausner et al., 1998).

Ho et al. (2012) situated their intervention in the field of oncology (gastrointestinal). They included six group sessions. Patients attended these sessions as outpatients for between 60-90 minutes per week over a six weeks period. The intervention, conducted by a psychologist, was based on a six-chapter manual developed for this purpose based on Snyder's hope model (Snyder, Rand, et al., 2002). One chapter was covered per session. The sessions focused on the introduction of hope theory, the setting of realistic and meaningful goals, developing hope pathways through problem-solving skills, hope agency development through positive self-talk, and reviewing the characteristics of people with high agency levels. The sessions were enhanced by assignments that patients had to complete at home and case scenarios (referred to as stories of hope).

Kashani et al. (2014) devised a hope intervention for the field of oncology (breast cancer) comprising eight, 90-minute sessions. Apart from being based on Snyder's (2000d) unidimensional definition of hope, this intervention also acknowledged four factors considered important in any form of psychotherapy, namely a therapeutic relationship, creating expectancy, raising patient awareness, and behavioural self-regulation (Lotfi, & Kashani, 1998 in Kashani et al., 2014). This intervention was effective in raising hope and reducing distress in patients.

The studies of Ho et al. (2012) and Kashani et al. (2014) used only quantitative measures to prove the effectiveness of their hope intervention strategies. As already mentioned, such strategies are limited in terms of providing experiential patient accounts of interventions (Black, & Jenkinson, 2009; Woolhead et al., 2005).

In summary, hope intervention from a unidimensional perspective is goal directed and often brief, and, although I disagree with the limitations of this perspective, I do consider creating a goal focus in patients as an important factor in any hope-based



intervention. The following techniques were identified in the unidimensional psychological interventions as having possible application value in I-HOPE of the present study.

Broad intervention approaches	Technique/Activity		
Psychoeducational	Introduction of hope theory.		
Cognitive-behavioural	Goal setting: Hope pathway development using goal worksheets.		
	Goal motivation: Hope agency development/creation and expectancy.		
	Cognitive behaviour therapy: Aimed at overcoming barriers to hope.		
	Self-regulation emphasised through relaxation, deep breathing, immagery, etc.		
Narrative	Narrative counselling used as a tool for cognitive engagement.		
Affiliative	Focused on therapeutic relationship.		
Brief solution-focused techniques	Aimed at cognitive goal development.		

Table 3.3:	Intervention	strategies	and	techniques	from	the	psychological
	(unidimensio	nal) field					

3.2.2.2 Multidimensional psychological interventions

In psychological research based on a multidimensional understanding of hope, many studies have been devoted to understanding how hope is inspired and enhanced in people (Edey, & Jevne, 2003; Edey et al., 2005; Larsen, & Stege, 2010a, 2010b), while only one study has been dedicated to describing a hope-based intervention in a medical context. As indicated on my hope research timeline (Chapter 2, par. 2.2.2), a multidimensional perspective on hope in psychological research only truly gained research momentum with the establishment of the Hope Foundation in Alberta, Canada, in 1992.

Drawing on hope literature in the fields of nursing and psychology, researchers associated with the Hope Foundation emphasised hope as both a visible and invisible aspect of psychological counselling and pointed out that hope can and should be used intentionally during intervention (Edey, & Jevne, 2003; Larsen et al., 2007). Intervention counselling strategies for fostering hope in a client in psychological counselling are relationship driven in that the therapist becomes a partner to the client (patient), fostering hope in the client through a supportive relationship (Edey, & Jevne,



2003; Edey et al., 2005). Interventions designed in a medical context are not often described in the literature, yet the counselling strategies that impact hope intentionally are well described and should also be applicable to the relationship between the patient and the therapist in a hospital setting. Furthermore, most of the examples of hope-based interventions I encountered in the literature were in group settings, yet I found the individualised use of hope-counselling strategies more relevant for the hope-based intervention described and explored in this study.

Hope-counselling strategies are categorised into implicit and explicit hope strategies (Larsen, & Stege, 2010a, 2010b). According to Edey and Jevne (2003, p. 49), therapists can, during intervention, strategically use "three linguistic tools", the language of "yet", "when", and "I believe", to foster hope intentionally. They can use these words or phrases to elicit a sense of possibility and expectancy in patients. Edey et al. (2005) maintain that the use of this kind of language conveys confidence to people and add that conveying hopeful statistics and success stories (narratives) as tools helps create a sense of possibility in people. I agree with Edey et al. (2005) that these linguistic tools may be very valuable in the training of hope therapists. If used competently by therapists, they can implicitly create expectations of a better future (hope) while conveying a sense of confidence.

Hope-focused counselling draws heavily on narrative, cognitive, behavioural, and existential therapeutic approaches (Massey, 2003). According to Larsen and Stege (2010a), implicit strategies in hope counselling contain two further catogories of which the first is the influence of the therapeutic relationship on the client's hope. This category includes being witness to hopelessness and highlighting patient resources, while the second category includes hope perspective change in the reframing of negative/hopeless thoughts (cognitive reframing, CBT), sharing hope narratives, using hopeful metaphors, externalising internal barriers to hope, and using humour (Larsen, & Stege, 2010a). Explicit techniques used by therapists include cognitive goal setting, setting priorities, asking future hope-focused questions, such as "what do you hope for?", and educating patients about hope (Larsen, & Stege, 2010b).

Howell, Jacobson, and Larsen (2014) reported on the application of a psychological hope-based intervention in a medical context from a multidimensional perspective with patients with chronic pain symptoms. The intervention, "Being hopeful in the face of



chronic pain" (Edey, King, Stege, & Larsen, 2016), was particularly interesting because it was based on the theoretical understandings of hope of Dufault and Martocchio (1985), Scioli et al. (2011) and Snyder, Irving and Anderson, (1991. Howell et al. (2014, p. 3) believe that these theories share the following components: "a future goal orientation, effectance, resilience, role of others and of trancendent experiences".

Howell et al.'s (2014) techniques were based primarily on a narrative and psychoeducational approach. Their six weekly, two-hour long group sessions, facilitated by two psychologists, included the following activities: a group hope poem (finding words that represent hope), completing "I hope …" sentences, encouragement to find personalised meaning, creating a hope collage, discussing personal narratives and strengths, acknowledging that hope is present despite hopelessness, mapping hope resources, seeking professional help for pain, and enacting a hope time machine activity (Howell et al., 2014). The intervention improved patient hope as measured quantitatively by pre- and post-intervention assessments.

The following techniques were identified in the multidimensional psychological interventions as having possible application value in I-HOPE of this study.

Broad	intervention approaches	Technique/Activity
	Emotion based/Motivational	Using humour
		Acknowledging hopelessness
es	Cognitive-behavioural	Highlighting patient resources
ategi		Externalising internal barriers to hope
Implicit strategies		Perspective change in reframing of negative/hopeless thoughts (cognitive reframing, CBT)
<u>_</u>	Narrative	Sharing hope narratives
		Using hopeful metaphors/poems
	Spiritual	Finding personalised meaning/hope
es	Psychoeducational	Educating patients about hope
ategi		Cognitive goal setting
cit str		Setting priorities
Explicit strategies		Asking future hope-focused questions such as "what do you hope for?"

Table 3.4: Intervention strategies and techniques from the psychological
(multidimensional) field



3.2.3 INTERVENTION SUMMARY

Considering the hope-fostering strategies discussed above, a large overlap in intervention strategies used in hope-based interventions is evident. Almost all the hope-based interventions found in the literature in a medical context were group interventions (Herth, 2000, 2001; Howell et al., 2014; Rustøen et al., 2011). Most of the interventions also took place during outpatient visits (Herth, 2001; Rustøen et al., 2011) or in nursing homes (Moore et al., 2014). None of these interventions took place in hospital during a medical treatment.

The interventions usually involved five or more sessions of between 60 and 120 minutes each over an extended period of time (Herth, 2000; Ho et al., 2012; Moore et al., 2014). Only Duggleby et al.'s (2007, 2013) interventions were limited to a period of one week with the patients taking part in self-regulated activities. None of the hope-based interventions were used in the context of TKR, although TKR is associated with chronic pain and was recently explored through a hope-based group intervention in an outpatient setting (Howell et al., 2014; Larsen, King, Stege, & Egeli, 2015).

In analysing the various hope-based interventions described in the literature, I found that their hope-fostering strategies were generally implemented using psychoeducational, existential, narrative, psychosocial, and congnitive-behavioural techniques. I was able to link these strategies to components of the integrative hope theory (Scioli et al., 2011) and to integrate their associated activities into the present study's I-HOPE. As these techniques have already been proven to increase patient hope, I decided rather to focus on the patients' experiences of the intervention than attempt to establish its validity again. Table 3.5 summarises what the hope intervention techniques/activities focused on as found in the literature that guided the present hope intervention. Aspects of these techniques/activities were built into this intervention as related to the integrative theory of Scioli et al. (2011).



Table 3.5: Hope techniques described in hope-based intervention literature

Approach	Specific hope-based interventions Technique/Activity focus	Intervention focus	Nursing interventions	Psychological (uni)	Psychological (multi)	Related activities in the brief hope-based in-hopital intervention
	Rustøen et al. (1998): nurse acts as educator and counsellor.	Educating patients about hope.				
	Herth (2001): discuss the meaning of hope and its relation to hopelessness.		v	v		
	Shin and Park (2007): learn about positive self-identity formation.	Learning about and exploring resources	V			
Psychoeducation	Kim et al. (2008): learn about positive self-identity formation.	and barriers.	v		v	"DVD"
eque	Klausner et al. (1998): relate to hope theory.	Learning how medical challenges can	V			"HOPE-scouting"
cho	Ho et al. (2012): learn about the characteristics of people with high agency.	influence hope, and vice versa.	v			(()
Psy	Ho et al. (2012): introduce hope theory.					"Mirroring"
	Kashani et al. (2014): raise patient awareness of behavioural self-regulation.	Reflecting on the process.		\checkmark		
	Howell et al. (2014): learning that hope is present despite hopelessness/raise time awareness.		, ,			
	Rustøen et al. (1998): reflect on spiritual beliefs and values to create a sense of meaning and purpose.	Raising spiritual awareness.	\checkmark			
piritual	Duggleby et al., 2007; Duggleby et al., 2013: emphasise meaning making of patients.	Discussing purpose and meaning.	\checkmark			"Becoming Aware"
ial/S	Duggleby et al., 2007; Duggleby et al., 2013: emphasise spirituality.	Focusing on values.	\checkmark			
Existential/Spiritual	Kim et al. (2008); Shin and Park (2007): value spiritual/transcendental development.	Focusing on light-heartedness/ humour.				"Mirroring"
	Kashani et al. (2014): create expectancy in patients through dialogue.	Creative expression (writing/drawing).	\checkmark			
	Howell et al. (2014): find personalised meaning.	Expressing fears.	\checkmark			



	Herth (2001): listen to patients' stories.					
	Herth (2001): create a hope collage.	Hope-based DVDs.	\checkmark			
ive	Duggleby et al., 2007; Duggleby et al., 2013: use a film/DVD.	Relating personal narratives to others.	√			"Celebration of Hope"
Narrative	Ho et al. (2012): use stories of hope.	Fostering uplifting memories.				
Z	Howell et al. (2014): create a hope collage.	Metaphors.				"Mirroring"
	Howell et al. (2014): personal narratives and strengths.	Journal keeping.	\checkmark		\checkmark	_
	Rustøen et al. (1998): emphasise relationships with others.					
ial	Rustøen et al. (1998): motivate through expectations of a future positive outcome.	Fostering a sense of connectedness.			N	
Psychosocial	Herth (2001): build a sense of community.	Encouraging social supportive				"In-touch/In-tune"
ychc	Duggleby et al., 2007; Duggleby et al., 2013: build supportive relationships.	relationships.	N	N	V	
Ps	Kashani et al. (2014): build on therapeutic relationships.	Therapist being a supportive partner.	\checkmark			initioning
	Kim et al. (2008); Shin and Park (2007): build on therapeutic relationships.					
	Rustøen et al. (1998): encourage active involvement.	Cognitive-behavioural Therapy (reframing).	\checkmark	\checkmark	\checkmark	
	Rustøen et al. (1998): normalise the feelings associated with illness.	Accepting and normalising emotions.				"Buckle Up"
ural	Rustøen et al. (1998): assist patients to relax through deep breathing, visualisation, and music activities.	Goal focus development.	\checkmark		\checkmark	"Get Well Card"
lavic	Herth (2001), discuss threats to hope.	Motivating goal achievement.				
e-ber	Herth (2001): redefine goals.	Reality surveillance.				"Debrief"
Cognitive-behavioural	Duggleby et al., 2007; Duggleby et al., 2013: value conscious decisions (Duggleby & Wright, 2005).	Scaling/Breaking down goals.				"Reclaiming/
Ŭ	Kim et al. (2008); Shin and Park (2007): set hope goals.					Reframing"
	Klausner et al. (1998): individualise goal development.					
	Klausner et al. (1998): practise relaxation skills, cognitive restructuring, and problem solving.	Relaxation/Deep breathing/ Music.	\checkmark	\checkmark	\checkmark	"Mirroring"



	Ho et al. (2012): set realistic and meaningful goals, develop hope pathways through problem-solving skills.	Visualisation.		\checkmark	
	Ho et al. (2012): develop hope agency through positive self-talk.	Linguistic techniques.			
al	Duggleby et al. (2007): symptom control.				
ogic	Herth (1990a): symptom control.	Symptom control	\checkmark		 Multiprofessional
Biol	Howell et al. (2014): seekiprofessional help for pain.				care



As mentioned before, because the intervention strategies in the present I-HOPE have already been proven to enhance hope in various other studies, I opted to change my research design from a focus on the quantitative validation of the intervention to a qualitative exploration of the intervention through the experiences of the participants. Drotar et al. (2014) encouraged me to engage in my qualitative exploration because of the fact that they had earlier, urged researchers to consider alternative research designs such as case studies aimed at exploring health-promoting interventions.

3.3 HOPE STRATEGIES RELATED TO THE MASTER THEORY

The following section discusses therapeutic techniques/activities that were used during I-HOPE. Due to the unique context and brief nature of the intervention, I had to consider evidence-based techniques/activities from existing hope interventions. These techniques and activities were grouped under overarching therapeutic approaches as presented in Table 3.5. The techniques and activities could be related to psychoeducational, existential/spiritual, narrative, psychosocial, and cognitivebehavioural therapeutic approaches as consistently identified in medical context hopebased intervention literature. The integrated focuses of the techniques and activities in hope-based interventions in such a context were included in the following activities of this study's I-HOPE: the "DVD" activity, "In-touch/In-tune" activity, the "Celebration of Hope" activity, the "Get Well Card" activity, the "Buckle Up" activity, the "Debrief" activity, the "HOPE-scouting" activity, the "Reclaiming/Reframing" activity, the "Becoming Aware" activity and the "Mirroring" activity. I will now discuss how these activities were used in I-HOPE of this study to connect the patients to the four-channel hope network (mastery, attachment, survival, spirituality) (Scioli et al., 2011). For a detailed description of the master theory of this study, as well as an overview of the intervention, the reader is referred back to Chapter 1.

A narrative approach was considered the best way to access and influence the participants' mental state. Narratives are based on facts as well as perceptions and are therefore extremely helpful in gaining access to patients on a cognitive and emotional level (Morgan, 2000). Narrative techniques were found to be prominent in the hope-based interventions of Duggleby et al. (2007), Herth (2001), Ho et al. (2012), and Howell et al. (2014). Starting the intervention with a "DVD" activity, similar to Duggleby et al.'s (2007, 2013) approach, made it possible to gain quicker access to



the participants' personal narratives as they could then relate to the hope stories of others. The aim with the DVD was to create a hopeful expectation in the participants by inspiring a positive, hopeful mindset. In the DVD, various individuals' stories are narrated, in which they choose to focus on what is right instead of what is not. The DVD contains underlying positive hope messages. Although it cannot be proven for this intervention, I hoped that through the positive messages shared in the DVD, the participants would be influenced biochemically as positive emotions are associated with the release of beneficial biochemical components on a neurological level (level 1 of the integrative hope theory) (Scioli et al., 2011).

On a psychosocial level, the therapist had to create a strong therapeutic bond with the participants despite the time limitations (session 1a, bonding for hope). I accordingly called this relational-based technique/activity "In-touch/In-tune". In this activity, the therapist got to know the participants and used person-centred techniques to connect with them therapeutically so that she and they could present themselves as partners during TKR. Such a bond is described in most hope-based interventions as the key to their success (Herth, 2001; Kashani et al., 2014; Rustøen et al., 1998). A further aim was to foster a sense of connectedness with the broader hospital community by welcoming patients as members of a caring hospital community and encouraging them to embrace the support from hospital staff (Scioli, & Biller, 2009). Especially in nursing and psychological counselling contexts, the literature I explored strongly acknowledged this factor (Buckley, & Herth, 2004; Herth, 1990b, 2001). Because therapists can instil trust in patients that can lead to openness (Scioli et al., 2011), it was considered important to train the therapist in the use of implicit hope counselling strategies (Larsen et al., 2007). These strategies can be associated directly with Scioli et al.'s (2011) attachment channel of hope. Attachment can, in turn, be linked to the amygdala in the temporal lobes and to the release of the hormone oxytocin (cuddle chemical) during caring contact (Scioli, & Biller, 2009). Although the "In-touch/In-tune" activity was framed specifically in the first session of the intervention, it was not seen as a once-off technique/activity as it had to be attended to constantly. Such social supportive relationships are representative of level 2 in the integrative hope theory (Scioli et al., 2011).

From the start of the intervention, various strategies of support and attuning with the participants were used such as fostering a sense of connectedness and promoting



uplifting memories (Herth, 2005). Scioli et al. (2011) argue that people have a predisposition to be trusting and open and that this can be supported in a therapeutic relationship (mentor/coach). Making the most of the therapeutic relationship was important in the intervention as developing trust and openness between the participants and the therapist was crucial for moving forward with intention. This strategy is confirmed in the literature for all fields of hope research, and is especially emphasised in nursing and hope counselling strategies (Buckley, & Herth, 2004; Edey, & Jevne, 2003; Edey et al., 2005).

Taking the narrative approach further, another technique/activity referred to as "Celebration of Hope" was included in the present intervention. In this activity, the participants were asked to relate their personal hope narratives to the therapist (Duggleby et al., 2007; Herth, 2001; Ho et al., 2012; Howell et al., 2014) as these narratives could help establish a sense of connectedness between their past and present realities. By first viewing the hope-inspiring DVD, the participants were more likely to access their own hopeful narratives and relate them to those seen in the DVD. The process of relating to others, even if they were not always physically present, was seen as an important psychosocial factor in the intervention. Van Dijk (2015) emphsises the key role of such a virtual community in strengthening a person's sense of community. People's personal narratives are deeply rooted in their biological and psychosocial development and are also connected to their spiritual meaning-making process. Making use of the DVD activity was thus aimed at addressing the participants' hope-related biological motives of mastery, attachment, and survival (Scioli et al., 2011).

An important narrative technique used during the second session of the intervention was to "Debrief" the participants after their surgical experience. This was done to provide emotional support and to assist emotional regulation. It included relaxing the participants through deep breathing if necessary. The "Debrief" was aimed at creating a close link with the participants' survival motive. In nursing counselling interventions, it has been found that being present for patients and affirming their worth during a crisis are crucial (Cutcliffe, 1995, 2004, 2006). Survival on this level is related to patients' fight or flight response and their immune system (Scioli, & Biller, 2009) (see detailed discussion in Chapter 2). The therapist's interaction during the "Debrief" session was directed towards calming the participants and relieving stress, which was



found to be an important focus in most hope-based interventions (Klausner et al., 1998; Rustøen et al., 1998). Stress release is known to activate neurobiological pathways and to strengthen the immune system (Beaton, 2003; Broadbent, & Loft, 2010).

Psychoeducational techniques were included in the intervention on the assumption that hope can be learned by people as a skill (Scioli, & Biller, 2010). Especially in unidimensional hope-based interventions, it is considered important to educate patients regarding hope as well as key aspects of medical procedures (Herth, 2001; Ho et al., 2012; Howell et al., 2014; Kashani et al., 2014; Rustøen et al., 1998). In seeking to educate the participants in the present study towards an integrative understanding of hope development in a way that was brief and easy to understand, two activities in particular were used. Firstly, the DVD was used to deliver positive hope messages by promoting hope-directed thinking in the participants and, secondly, a psychoeducational discussion was held on how hope is developed using the "HOPE-scouting" activity. In this activity, the HOPE metaphor of Farran et al. (1995) was employed to educate the participants towards an integrative understanding of hope. Farran et al.'s (1995) acronym of hope offered an easily understandable way to explain, explore, and reflect on hope in a hospital context. It could also be linked to what Scioli et al. (2011) considered important on all levels of hope development. The linkage between the HOPE metaphor and the theory of Scioli et al. (2011) is viewed as follows: H – Health, refers to Scioli et al.'s (2011) biological components of hope. This relates in particular to mastery and survival but also implies attachment as a biological need. O – Others, refers to the important relationships that shape hope. This is driven by a need for obtaining a sense of attachment, which strengthens mastery and fosters survival. P - Purpose, refers to the spiritual component of hope development. E – Engage, refers to the rational engagement of the patient (Farran et al., 1995).

The rational engagement of patients is directly related to the cognitive engagement with their problem and the behaviour that flows from this (Snyder, Ilardi et al., 2000). These cognitive-behavioural aspects of the present intervention included goal development during the "Get Well Card" activity. In this activity, the participants were asked to formulate their goals during the TKR process (finding hope), and the therapist assisted them in creating a personal "Get Well Card" addressed to



themselves. This was considered a creative way to assess the TKR process and the participants' expectations – the participants could express their fears and wishes during this process. Where needed, the therapist could use cognitive-behavioural techniques to normalise emotions or even confront and reframe irrational thoughts. During this process, the therapist could make use of hope language and questions such as "What is your hope?" or "What do you hope for?", as described in psychological hope counselling research (Larsen, & Stege, 2010b).

In another cognitive-behavioural activity, the "Buckle Up" activity, the therapist could engage cognitively with the patients after the "Get Well Card" had been made to ensure that their expectations were realistic and that they had adequately braced themselves for possible unfavourable outcomes (Morse, & Doberneck, 1995; Morse, & Penrod, 1999). The "HOPE-scouting" activity was also part of the cognitivebehavioural approach. In this activity, the HOPE acronym was used to guide the patients towards becoming aware of their available resources and potential barriers in achieving their goals (Morse, & Doberneck, 1995; Morse, & Penrod, 1999).

These cognitive-behavioural techniques/activities were directed towards achieving mastery. Scioli and Biller (2009) link mastery to a person's frontal lobe abilities where it is associated with planning and taking the initiative. To facilitate the cognitive-behavioural component during the present intervention, Morse and Doberneck's (1995, p. 277) guidelines were followed, which involved creating a "realistic initial assessment of the predicament or threat, the envisioning of alternatives and the setting of goals, a bracing for negative outcomes, a realistic assessment of personal resources and of external conditions and resources, the solicitation of mutually supportive relationships, the continuous evaluation for signs that reinforce the selected goals, and a determination to endure".

The "Reclaiming/Reframing" activity was based on reassessing the participants' goals during the TKR process in terms of experienced barriers (Herth, 2001). Although no new psychoeducational information was included, the participants were reminded of how hope was developed and of the importance of using their resources to create a purposeful/meaningful experience. The participants were given psychosocial support to reclaim hope while cognitively engaging with problems or challenges they might have encountered (Klausner et al., 1998). In doing so, the mastery and attachment



hope channels in particular were accessed. When needed, the activity was directed towards the cognitive restructuring of any irrational or destructive thoughts that might have occurred (Henderson, & Thompson, 2011; Klausner et al., 1998). It is stated in Chapter 4 that participants with serious pathology should be referred to a clinical psychologist and/or psychiatrist.

On an existential/spiritual level, the therapist played an important role in allowing discussions on personal beliefs, spirituality, meaning making, values, fostering a sense of purpose, and raising awareness of life. The activity framing these issues is known as the "Becoming Aware" activity. During this activity, the therapist engaged in a discussion with the participants on the level of their beliefs as related to their sense of purpose and meaning (Howell et al., 2014; Rustøen et al., 1998; Shin, & Park, 2007). The therapist also respectfully engaged with the participants in terms of their spiritual meaning-making process by asking them if this process had a deeper significance for them. According to Scioli et al. (2011), family, culture, and spiritual beliefs are important factors in achieving mastery, attachment, and survival (level 4 of Scioli et al.'s (2011) theory). Spirituality can, but does not always, include religion. It can tap into multiple sources of faith including a higher power, the self, others, technology, nature, institutions, diversity, and equality (Scioli, & Biller, 2009; Scioli et al., 2011).

The expression of hopeful behaviour, as based on one's beliefs (level 5 of Scioli et al.'s (2011) theory) was considered important, and the therapist gave the participants the space to express their own spiritual meaning and allow all three hope motives (attachment, mastery, and survival) to be incorporated into their spiritual meaning-making process on this level. Another part of the "Becoming Aware" activity was the therapist's asking the participants to become more aware of the signs of life all around them. This could include anything that they associated with life such as beautiful surroundings, fragrances, and sounds. Herth (2001) reported on a similar activity in the Hope Intervention Programme (HIP).

The last activity was "Mirroring" where the therapist summarised the therapeutic process. As with Herth's (2001) interventions, the participants were allowed to reflect on the TKR and I-HOPE process. This session was both supportive and motivational in nature and guided by the expressed needs of the participants who were motivated



to endure in the process ahead (Morse, & Doberneck, 1995). The participants were given a platform to express their further wishes, fears, and expectations. They were encouraged to stay in touch with people who provided social support and to use their hope resources to overcome barriers after discharge.

Table 3.6 summarises the integrative theory's characteristics regarding the choice of intervention strategies.

Level of hope development	Channel of hope development	Specific characteristics	Intervention techniques/activities
Level 1 – Biological motives	Mastery Attachment Survival	Fight or flight response (survival oriented)	Session 2 – Debrief Emotional support. Awareness of threats to hope and managing physical symptoms through a multiprofessional team approach.
		Neurological	Plays a role in all sessions;
		Biochemical	specifically targeted by the inclusion of the DVD
		Immune system	Celebration of Hope.
Level 2 – Endowment	Attachment	Trust	In-touch/In-tune
and support (nature/ nurture)		Openness	Relationship-oriented approach.
Level 3 – Hope traits	Mastery and	Will to hope	In-touch/In-tune
	attachment (goal-related trust)	Mediated power	Therapeutic relationship, especially sessions 1, 3, and 4.
		Sanctioned commitments	Get Well Card
		Openness	Goal setting and motivation.
	Attachment	Openness	of hope (Morse, & Doberneck,
	(relational trust)	Disclosure	1995).
	Survival-oriented	Fear management	
	trust	Continue despite setbacks	
Level 4 – Faith system	Spiritual	Beliefs related to mastery, survival, or attachment Meaning	HOPE scouting Becoming Aware Discussion of HOPE acronym (Farran et al., 1995).
Level 5 – Hope	Spiritual	Action commitment	Mirroring
behaviours		Acts of trust and openness	Buckle Up

 Table 3.6:
 The integrative theory and related strategies



Level of hope development	Channel of hope development	Specific characteristics	Intervention techniques/activities
		Trust in own survival	Discussion of HOPE acronym (Farran et al., 1995).
		Sense of purpose	Reflecting.

3.4 I-HOPE

As stated earlier, I-HOPE as an intervention was developed because of a specific need expressed in the context of TKR. It was based on a synthesis of various successful hope-based interventions from within the medical field and built on the framework of Scioli et al.'s (2011) integrative hope theory. This section positions the intervention in the broader domain of psychological interventions – a more complete description of I-HOPE will be given later.

3.4.1 POSITIONING THE INTERVENTION IN PSYCHOLOGY

According to Westmaas et al. (2007), an intervention can be delivered on various levels: on a primary level to prevent illness; on a secondary level to stop or reverse the progression of an illness; or on a tertiary level to control the complications of an illness. Considering this, I positioned the intervention mainly on a primary intervention level as the therapist promoted hope development in the participants in order to prevent the development of hopelessness or mental illness during the TKR process (Westmaas et al., 2007).

Scioli et al. (2011) define hope as an emotion yet stress the need to address the cognitive as well as the emotional elements of hope in order to develop a successful therapeutic intervention. They further advocate the practical application of their integrative theory in the field of health psychology (Scioli et al., 2011). Because psychological interventions in a medical setting can be very broad, a close understanding of this study's objectives is essential.

The main aim of the intervention was to develop and maintain hope in TKR patients as a preventative measure against hopelessness during the TKR process. Within the broader domain of health psychological interventions, this intervention fell in the category of health-promoting interventions, with some elements of stress management



and motivational support. Health-promoting interventions consist of educational interventions that promote positive health behaviours in relatively normally functioning people (Ayers, & De Visser, 2011).

The following assumptions governed the intervention: The intervention was, as previously discussed, positioned within a positive psychological strengths based philosophy and did not focus on removing patient deficits, but rather on promoting hope as an emotional strength (Scioli et al., 2011; Seligman, & Csikszentmihalyi, 2000). It further assumed that patients can be taught to hope (Scioli, & Biller, 2010) and that learning and development are lifelong endeavours not confined by age (Louw, & Louw, 2013) that can benefit in-hospital older adult patients. Lastly, it assumed an integrative eclectic therapeutic approach as found in hope counselling (Ayers, & De Visser, 2011). This meant that the therapist would adapt her therapeutic strategy to some degree, to more effectively address the participants needs.

Yohani and Larsen (2012) argue that the integrative hope theory of Scioli et al. (2011) may be helpful in promoting patient hope during psychotherapy. Scioli et al. (2011, p. 94) also envisioned the possibility "[of developing] an integrative hope-centred (hope-based) therapy (intervention)". In order to develop an intervention based on this theory, I integrated existing intervention strategies from the nursing and psychology research fields that have proven valid in fostering hope in patients as several of these strategies overlap with Scioli et al.'s (2011) theory. This was considered appropriate as I was using a qualitative research design and did not intend establishing the quantitative validity of the intervention.

The present study's intervention, although based specifically on the integrative theory of hope (Scioli et al., 2011), was therefore also guided by other hope-based interventions. The psychoeducational base associated with these interventions (Duggleby et al., 2007; Rustøen et al., 1998), the emphasis on goals (Howell et al., 2014), the use of reality and resource assessment (Duggleby et al., 2013), as well as the use of narratives (Herth, 2000, 2001), accordingly all played a role in the development of this hope-based intervention.

The intervention was developed for administration to participants over a period of four sessions during their hospitalisation for TKR surgery. The reality of the in-hospital



context is that patients normally spend one week in hospital from admission to discharge, which dictates the duration of hope-based interventions. Such interventions were found to be successful in increasing hope in a meta-analysis of hope interventions by Weis and Speridakos (2011). In the present study, as mentioned earlier, factors such as the participants' decreased attention span, reduced energy levels, and lack of privacy also had to be considered (Farran et al., 1995). The therapist remained constantly aware of the participants' physical medical needs throughout the intervention as it was important to have managed symptomatic responses for optimal therapeutic engagement.

The TKR context was also set apart from the cancer and palliative care environments where hope-based interventions generally take place. The interventions reported on in the field of chronic pain were perhaps contextually more similar to those of TKR, yet, as with the other interventions, they were also group interventions administered over a longer period of time and not delivered to patients as an in-hospital service (Howell et al., 2014; Larsen et al., 2015).

The present intervention was framed in the South African context where health psychology as a sub-discipline of psychology is still an emerging science (Kagee, 2006). Through promoting hope in patients, I-HOPE in its current form has a strong emphasis on health promotion and mental illness prevention. The intervention could be of value to psychology professionals seeking to provide preventative psychological health care to patients. As such, it could be used by psychologists and/or counsellors alike to provide preventative care for TKR patients.

3.4.2 DESCRIBING I-HOPE

The following description elaborates on the overview of the intervention provided in Chapter 1 as well as in a previous section of the current chapter (paragraph 3.3) and should therefore be read together with these previous descriptions. Table 1.2 presents a structural overview of the intervention.

I-HOPE was administered over four sessions, which commenced at the research site (a private hospital) after admission into private rooms for those participants who consented to the research and intervention processes. Before starting with the



intervention and before its termination, the therapist had to determine the existing levels of hope of the participants from a therapeutic point of view. These hope levels were assessed by means of the Herth Hope Index (HHI) (Herth, 1992). Assessing hope, as a way of informing the therapeutic process, is described in hope intervention literature as an important way to monitor progress in therapy (Lopez, Floyed, et al., 2000). The participants were screened for existing psychopathology by the medical team with the help of a questionnaire on existing mental conditions in the preadmission phases. The HHI could also further identify participants with psychological problems at the time of admission who were not in a fit state of mind to participate in the study. The data from the HHI were purposefully not included so as not to infringe on the patient-client confidentiality between the participants and the therapist during the intervention process. The data collection was therefore aimed only on experiential data.

Table 3.7 summarises the links between this session and the integrative hope theory.

BEFORE SURGERY – IN HOSPITAL	Session	Therapeutic sub-goals aimed at hope enhancement as main goal	Addressing the four channels of Scioli et al.'s (2011) network of hope
	Session 1a (20 minutes) "DVD"	• Create a hopeful expectation.	Spirituality and Mastery
		Inspire a perspective of hope.	Mastery: motivational
		 Create a positive mindset. Elicit positive emotions through positive images. 	Spirituality and Mastery
		Raise awareness of larger social network.	Attachment
		Educational teaching strategy, vicarious learning experience.	Mastery: educative
	Session 1b (30 minutes) FINDING HOPE, & BONDING FOR HOPE "In-touch/In- tune" "Celebrate	 Welcome participants into the caring hospital community (sense of belonging). 	Attachment: acceptance and belonging
		 Establish and motivate willingness to partner hospital staff towards mobility recovery. 	Mastery: motivational Attachment
		• Establish a sense of trust in hospital staff and process (you are in good hands).	Attachment: trust relationship
		• Establish a bond of care and trust between therapist and participants (bonding).	Attachment: care, & trust – therapeutic relationship

 Table 3.7: Linking session 1 with the integrative hope theory



Hope"	 Tap into participants' personal hope narrative. Identify and break down resistance. Access personal hope metaphors (empower participants). 	Integrative dimensions – attempt to establish a personal, meaningful experience
Session 1c (30 minutes)	 Assist participants to express their expectations, fears, and wishes. 	Mastery: goal setting and overcoming obstacles
FINDING HOPE, & BONDING FOR HOPE	• Create realistic expectation of TKR process.	Mastery
	 Assist participants in framing value-centred goals. 	Spirituality and Mastery
"Get Well Card" "Buckle Up"	 Create a sense of meaning/purpose during TKR process. 	Spirituality and Mastery
	 Assist participants in bracing for possible negative outcomes. 	Survival

Session 1a: As described in Chapter 1, a DVD was used psychoeducationally to elicit participant narratives as also reported in the hope-based interventions of Duggleby et al. (2007) and Duggleby et al. (2013). The 20-minute DVD, "Celebrate what is right with the world" (Jones, 2007), is narrated by DeWitt Jones who worked for many years as a *National Geographic* photographer. It portrays people's hope-inspiring stories visually. Hope is framed implicitly through the DVD, encouraging people to achieve a positive life perception, to celebrate what is right with the world, to see possibilities, and to create a hopeful life expectancy (Egan, 2014; Lynch, 1974). Throughout the DVD, positive pictures (photos) and messages are used to elicit positive feelings.

Through the DVD, positive emotions – related to the activation of the left brain hemisphere – could be inspired or stimulated in the patients (Jones, & Fox, 1992; Niemiec, & Wedding, 2014). The positive contribution of such emotions to psychoneuroimmunology, as associated with chemical packages (hormones) to stimulate and sustain health in patients, is discussed in paragraphs 1.7 and 2.3.4 (Ayers, & De Visser, 2011; Broadbent, & Loft, 2010; Scioli, & Biller, 2009). Richman et al. (2005), who studied the influence of hope over a period of two years across three distinct medical contexts, confirmed that developing hope in patients may bennefit their immune systems. Meagher, Arnau, and Rhudy (2001), who showed images/pictures associated with positive emotions to patients, found that the positive emotions (affective states) thus activated could also attune the experience of pain. The DVD activity could thus stimulate the biological component, which deals with hope on level 1 of the integrative hope theory. According to Richman et al. (2005), activating



positive emotions can play a protective role in people, decreasing the likelihood of disease development. The following quotation sheds light on the importance of, and close link between, our thoughts and emotions and their direct influence on our biological functioning, which Scioli et al. (2011) viewed as encaptualating the blueprints of hope.

"Mind' is a manifestation of the brain. What we view as products of the mind (thoughts, feelings, and emotions) are a mighty mix of chemicals and electrical circuits that have evolved over the millennia, and are still changing. So, too, is consciousness – our memory of the past, awareness of the present, and anticipation of the future. 'Body' includes brain, and thus mind, so that the construct 'mind-body connection' only emphasizes the artificiality of how we have traditionally divided them" (Cohen (n.d.), in Groopman, 2005, p. 167).

As discussed in Chapter 1 and in this current chapter (paragraph 3.3), the DVD created a larger virtual social network for the participants. Creating a sense of being part of a community can contribute directly to a person's sense of belonging and feeling attached to others. The positive mindset promoted in the DVD was also skilfully linked by the producer to everyday, ordinary people with whom the participants could identify with and relate to. This contributed to vicarious learning (Herrman, 2006) as the participants were inspired to master their own challenging situation (TKR).

Session 1b: As the therapist welcomed the participants, careful attention was given to making them feel they were part of a community of care (attachment). The therapist also explored the participants' sense of trust in the hospital staff and processes and confirmed a personal trust in her as therapist. This was done to strengthen the participants' hope as scientific literature reveals that a therapist's personal hopefulness can increase participant hope. In fact, Jevne (1993) argues that hope in participants starts with their hope in helping professionals. In this session, it was crucial for the therapist to establish a solid therapeutic relationship with the participants based on trust and emotional safety. Such a therapeutic bond is considered a key indicator of psychotherapeutic success (Edey, & Jevne, 2003; Lopez, Floyed, Ulven, & Snyder, 2000; Talley, 1992). Building and maintaining quality relationships between the participants and the hospital staff was regarded as key in setting a scene of trust and openness for developing hope (Scioli, & Biller, 2010). The



importance of this bonding relationship on hope development has been confirmed by various researchers (Farran et al., 1995; Lopez, Floyed et al., 2000).

With the therapeutic relationship as the basis for hope, the therapist in the present study then motivated the participants to trust the hospital system. The participants' trust in the medical staff and their willingness to collaborate with hospital staff were explored, potentially addressing the attachment and mastery components of hope.

Of particular importance in this session was that the therapist gave the participants the opportunity to tell their personal hope narratives, which were often elicited after they had reflected on the DVD narratives. These narratives were seen as the link between the participants' past experiences and future expectations and their current lived realities (temporal). This link was very important as personalising the therapy was a unique feature of the intervention – previous interventions had taken place often only in group contexts. The narratives also provided personal metaphors that the therapist could use during the brief counselling sessions (Morgan, 2000; Presbury, Echterling, & McKee, 2002) to remind the participants about previous hopeful experiences, breaking down irrational thinking (cognitive reframing) when necessary. The narratives also enabled the participants to access their personal sense of mastery or refer back to the DVD community to obtain a sense of mastery. It was therefore crucial for the therapist herself to have high levels of hope (Jevne, 1993). Hope narratives are also helpful in picking up on and breaking down resistance as participants generally cannot resist looking for hopeful themes (Lopez, Floyd, et al., 2000).

Session 1c: As also mentioned in Chapter 1, the "Get Well Card" activity was aimed at allowing participants to express their expectations, wishes, and fears before surgery. The therapist would at this stage put questions to the participants such as: "What do you hope for during TKR?" or "What would you like to achieve through the TKR process?" The therapist assisted the participants to create a card that they addressed to themselves. They were initially asked to elaborate on what they hoped for during the TKR process and were guided in framing their goals and expressing their fears and wishes. The aim of the session was to guide the participants towards a greater sense of mastery and to give them the opportunity to express their spiritual beliefs and needs.



Goals are linked to participants' mastery-oriented processes and play an integral part in attaining hope in hope theory (Scioli et al., 2011). Hope, according to Scioli and Biller (2010), is reserved for those goals that define people's lives, giving them an anchor, a trajectory, and leaving them a legacy. The therapist thus taps into participants' capacity for personal meaning making and sense of purpose, which is seen by Scioli et al. (2011) as an important aspect to address at this stage during the intervention. This aspect was also emphasised by the work of Morse and Doberneck (1995) through highlighting having a realistic discussion of participants' expectations as well as assisting participants in bracing for possible negative outcomes.

These issues were considered important as they related directly to the coping process as was also pointed out in Chapter 2. Table 3.8 summarises the links between session 2 and the integrative hope theory.

	Session (±40 minutes)	Therapeutic sub-goals aimed at hope enhancement as main goal	Addressing the four channels of Scioli et al.'s (2011) network of hope
	Session 2 ENHANCING HOPE- "Debrief" "HOPE- scouting" "Becoming Aware"	 Provide emotional support through short post-surgical debrief in terms of health (H). 	Attachment, mastery, and survival
		 Assist participantstowards emotional self-regulation – calming them if necessary. 	Mastery
		 Provide emotional support by creating an expectation that things will improve. 	Attachment
PITA		Teach HOPE acronym.	Mastery, attachment, and Spirituality
AFTER SURGERY – IN HOSPITAL		 Raise awareness of available supportive relationships (friends, relatives, and also in-hospital) to create a positive sense of others (O). 	Mastery
		 Tap into participants' personalised sense of meaning/purpose (P). 	Mastery and Spirituality.
		 Raise participants' awareness of hope resources. 	Mastery
		 Engage (E) participants' thoughts in terms of their set goals. 	Mastery
		Identify barriers to hope.	Mastery
		Establish personal priorities.	Mastery
		 Encourage hope in participants through life awareness. 	Mastery and Spirituality.

 Table 3.8: Linking session 2 with the integrative hope theory



Session 2: As also pointed out in Chapter 1, this session was particularly important in dealing with possible surgical trauma. The therapist started the session by debriefing the participants in terms of their surgical and in-hospital experiences up till then. This was considered important as this session took place after the participants had been discharged from the high care or intensive care units (HCU/ICU). The participants were assisted to develop a sense of control over their environment by, where applicable, reassuring them that what they were experiencing was normal in the TKR process (normalising). The therapist thus became a witness of the participants' ability to survive and overcome (survival and mastery). The participants were also reassured that they were in caring and competent hands in the hospital care system. This was done by referring back to the earlier discussions (section 1c) on guidance towards cultivating a realistic expectation of TKR and bracing the participants for possible negative outcomes (Morse, & Doberneck, 1995).

At this stage, the therapist also assisted the participants by raising their (sensual life) awareness (Herth, 2001) of their life-inspiring surroundings through vision, sounds, smells, tastes, and feelings. An important component of this session was teaching the participants how they could access hope using the HOPE acronym (Farran et al., 1995). This acronym was also helpful in raising awareness of hope resources that could be accessed by the participants (Morse, & Doberneck, 1995). The participants were encouraged to reflect on how their current experience (H – health), their relational support (O – other), their sense of purpose and meaning (P – purpose), and their ability to be active (E – engage) during the TKR process contributed to their current hopefulness. Using hope psychoeducationally during the intervention was in line with hope therapeutic principles (Lopez, Floyd, et al., 2000).

Scioli et al. (2011) viewed hope as an emotional network, and the HOPE acronym was an easy way to capture the essential four channels of the emotional hope network. The survival and mastery channels of hope were accessed in therapy through the discussion of the participants' health (H). The attachment channel was accessed through the acronym's relational (O) component, while purpose and meaning (P) were associated primarily with the spiritual hope channel of the participant. The last letter in the acronym (E) was described by Farran et al. (1995) as a component of rational engagement, which included considering goals, assessing resources, becoming actively involved in taking small steps towards achieving goals, taking control of one's



destiny and, lastly, integrating the past, present, and future in a hopeful way (Farran et al., 1995).

The psychoeducational base of this intervention was therefore aimed at engaging the participants with hopeful thinking in the four hope channels of mastery, survival, spirituality, and attachment (Scioli, & Biller, 2009, 2010; Scioli et al., 2011). In dealing with these key aspects of hope, barriers to hope that occurred were also identified and placed in context (Herth, 1990a).

Previously set goals were revisited in relation to available resources, while establishing priorities in terms of the participants' goals was discussed. The therapist asked questions such as: "How do you view the next important steps for achieving your goals?", "What should you be focusing on now?", How important is this goal to you at the moment?" The therapist was fully aware of the importance of engaging with the participants in a natural and unforced therapeutic manner that remained person centred.

An important spiritually based component of this session was linking what was happening to the participants with a sense of personal purpose and meaning. In the literature, the meaning-making process is often directly linked to establishing a sense of hope (Mascaro, & Rosen, 2005). The participants were asked: "What does this process mean to you?" and if necessary: "What does this process mean to you on a personal level?" The therapist realised that the participants' personal meaning had to be validated and that care had to be taken to enhance hope from the existing personal narratives (Lopez, Floyd, et al., 2000). Table 3.9 summarises the links between session 3 and the integrative hope theory.



	Session (±30 minutes)	Therapeutic sub-goals aimed at hope enhancement as main goal	Addressing the four channels of Scioli et al.'s (2011) network of hope
AFTER SURGERY – IN HOSPITAL	Session 3 REMINDING ABOUT HOPE "Reclaiming/ Reframing"	• Provide emotional support by being witness to the participants' progress or struggles towards their goals as discussed during the "Get Well Card" activity.	Attachment and mastery
		 Provide emotional support by creating an expectation that things will improve. 	Attachment, mastery, and Spirituality
		Engage the participants' sense of meaning/purpose (reinforce).	Spirituality and mastery
		• Provide voice for Spirituality meaning making.	Spirituality
		Remind the participants about their goals (reinforce).	Mastery
		• Deal with barriers to hope if necessary.	Mastery
		Remind the participants about their resources.	Mastery

Table 3.9: Linking session 3 with the integrative hope theory

Session 3: To some extent, the therapist became a witness to the successes and challenges experienced by the participants on the way towards achieving their goals (Herth, & Cutcliffe, 2002a; Larsen, & Stege, 2010a). In this session, the therapist used the therapeutic bond to provide a sense of attachment and also emotional support in expectation of healing and improved recovery. She specifically aligned the psychological intervention with the progress and the struggles of the participants during the recovery process as they were reminded of the goals they had set for themselves in session 1c during the "Get Well Card" activity. These goals were thus reinforced (Morse, & Doberneck, 1995).

Previous successes in maintaining hopefulness as gleaned from the therapeutic narratives in session 1b were celebrated, and experienced failures were positively framed through the perspective that it was possible to overcome on an emotional level before seeing results on a physical level through hope. This was in line with hope therapy where cognitive behavioural strategies are used to reinforce previously explored narratives of hope (Lopez, Floyd, et al., 2000; Snyder et al., 2000). I also saw this as a process of reality surveillance while reminding participants of their personal hope resources (Herth, & Cutcliffe, 2002b; Morse, & Doberneck, 1995).



As the last part of this session was aimed at reinforcing hope though reminding, the participants were once again requested to engage in a process of personal meaning making, with the therapist asking: "How do you view the meaning and purpose of what you are experiencing at present?" In responding, the participants had to explore their sense of mastery, survival, and spirituality in the present in relation to their past and their expectation of the future. Research shows that existential (spiritual) meaning correlates strongly with psychological health and enhances hope in patients (Mascaro, & Rosen, 2005, 2006). This finding helped align the intervention with current hope counselling perspectives (Massey, 2003) and allowed it to address the spiritual motive in achieving hope (Scioli et al., 2011). Table 3.10 summarises the links between session 4 and the integrative hope theory.

	Session (±20 minutes)	Therapeutic sub-goals aimed at hope enhancement as main goal	Addressing the four channels of Scioli et al.'s (2011) network of hope
IN HOSPITAL BEFORE DISCHARGE	Session 4	 Summarise all sessions and reflect on future initiatives aimed at living a hopeful life. 	Mastery, attachment, survival, and Spirituality
	REFLECTION "Mirroring"	 Raise awareness of available support networks, including providing contact details for further psychological intervention. 	Mastery and attachment
		 Identify internal and external resources after discharge. 	Mastery, attachment, survival, and Spirituality
		 Encourage participants to initiate healing by taking action towards achieving goals. 	Mastery
		Encourage participants to keep in touch with others.	Attachment
		 Encourage the expression of hope in a personally meaningful way. 	Spirituality
		Wish participants a hope-filled recovery.	Mastery, attachment, survival, and Spirituality

 Table 3.10:
 Linking session 4 with the integrative hope theory

Session 4: This session was less structured than the previous sessions in that the participants were given an opportunity to reflect on important aspects of the intervention in terms of the TKR process. The therapist summarised the sessions and gave the participants an opportunity to reflect on the TKR process on the basis of the HOPE acronym they were taught during session 2 of the intervention. The therapist engaged the participants in reflecting not only about what had been established during



the in-hospital therapeutic intervention, but also in projecting hope strategies towards the future.

This was important as the participants were on the verge of being discharged from hospital and had to be aware of their attachment to a support network. In this session, the participants were encouraged to achieve their goals and maintain their attachment to important others in their lives. They were also assured that further support was available if needed (Herth, & Cutcliffe, 2002b). Although encouragement was an important factor throughout the intervention, it was specifically included in this last session as research has revealed that the success of brief interventions depends largely on the extent to which the therapist manages to encourage participants to achieve the therapeutic goals (Edey, & Jevne, 2003; Talley, 1992). Coppock, Owen, Zagarskas, and Schmidt (2010) point out the importance of a therapist's hope in their clients during an intervention as it can influence the therapeutic outcomes either positively or negatively. It was therefore important to reassure the participants about the confidance that the therapist have in them to overcome the challenges associated with TKR by providing hopeful and honest encouragement. This was done to strengthen the participants' ability to continue integrating hope into their further rehabilitation and maintain their hope after discharge (Morse, & Doberneck, 1995).

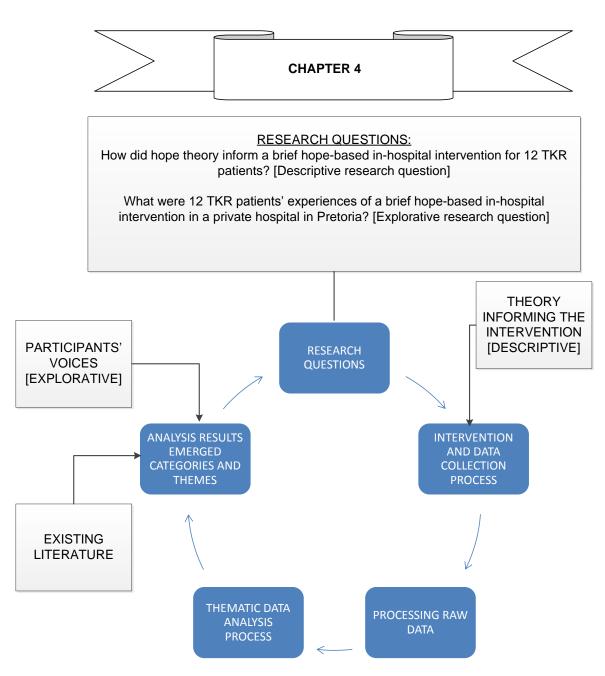
3.5 CONCLUSION

The literature review revealed three major areas of hope intervention research that influenced my view on how a hope intervention could be based on the integrative theory of Scioli et al. (2011). Traditional psychological interventions have influenced hope therapy along the lines of a Western-style individual development of hope. However, it seems that integrating the hope intervention work done in the nursing and counselling psychology fields into I-HOPE greatly complemented the integrative multidimensional hope intervention approach followed in this study.

Although this intervention was based on the broader more inclusive view of hope as described by Scioli et al. (2011), I did not reject unidimensional perspectives on hope but rather integrated them into the intervention.

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4.1 INTRODUCTION

Chapter 1 gave a brief overview of the study's research methodology. This chapter provides a more in-depth discussion of the methodology. The philosophical and methodological paradigms – the foundations of the research – are discussed first. I then explain the methodological choices and unpack the data collection techniques used. The data analysis and interpretation methods are explained as well as the steps taken to ensure the quality and trustworthiness of the study thus giving insight into the processes put in place to limit bias and ensure confirmability of the results. The chapter ends with a discussion of the protocols that ensured ethically responsible research practices throughout the study.

4.2 PARADIGMATIC PERSPECTIVE AND METHODOLOGICAL PARADIGMS

The study was based on an interpretivist world-view and used a qualitative research methodology. In the following section, I discuss the underlying assumptions and theoretical principles on which these paradigms were based, and, in doing so, provide insight into the subsequent research design and data collection strategies. I concur with Elias's (1986, p. 20) statement that "[it] is possible to advance knowledge and to make discoveries in the field of sociology with methods which can be very different from those of the natural sciences. The discovery, not the method, legitimises research as scientific". I further believe we are beyond the point of needing to defend interpretivism or, for that matter, positivism as legitimate research paradigms as each has its own unique strengths and weaknesses. I do, however, believe that justification of the study's research and methodological paradigms is important and will therefore engage with this topic towards the end of this section.

4.2.1 META-THEORETICAL PARADIGM (INTERPRETIVE)

Meta-theoretical interpretivism has developed since the 19th century from the hermeneutic tradition (Nieuwenhuis, 2007; Nieuwenhuis, 2016). Hermeneutics



originated in religious literary studies aimed at revealing deeper meanings in text when relating its parts to the whole (Neuman, 2006) and is rooted in a qualitative approach to research. Similarly, interpretivism focuses on discovering subjective meaning through the study of participant experiences (Myers, 2000). Interpretivism was a reaction to the positivist tradition, which advocates objective and measurable reality. The positivist paradigm dominated 19th century Western science (Murray, & Chamberlain, 1999; Nieuwenhuis, 2007) and is based on the works of various philosopers including the French philosopher, Auguste Comte, who believed in observation and reason as ways to understand human behaviour (Cohen et al., 2011). Positivism is based on the belief that an objective reality exists, that it is directed by universal societal laws, and that it can be discovered in the social sciences in the same way as in the natural sciences (Cohen et al., 2011). Conversely, the interpretivist believes that social sciences research differs from natural sciences research as it requires human interpretation of life's meaning (De Vos, Strydom, Fouché, & Delport, 2011). This implies that reality cannot be objectively defined but has a subjective nature. Interpretivist researchers accordingly value the human ability to create meaning from experiences (Myers, 2000).

As mentioned earlier, interpretivism is based on the hermeneutic tradition of interpreting human action (Bryman, 2004; Neuman, 2006). Approaches such as phenomenology, critical theory, and constructivism developed from this original interpretive perspective (Nieuwenhuis, 2007; Niewenhuis, 2016). The German, Max Weber (1864-1920), is often credited with having a major influence on interpretivism (Bryman, 2004; Neuman, 2006). According to Bryman (2004), Weber introduced the concept "Verstehen" to social science researchers. This concept implies that the researcher has to develop an empathic understanding of people in order to interpret their experiences (Bryman, 2004; Neuman, 2006; Terre Blance, & Kelly, 1999). The "Verstehen" concept encapsulates the interpretive understanding of both the scientific cause and effect of human behaviour through the interpretation of meaning (Bryman, 2004).

Interpretivism is based on very specific assumptions, the first of which relates to the interpretive researcher's view on reality. The ontological view of the interpretivist is that people are inseparable from reality (Weber, 2004). Reality is therefore constructed from within, through people's creation of shared meaning (Nieuwenhuis,



2007). This, according to Weber (2004), implies that we constantly negotiate meaning with others as we create an intersubjective reality, also referred to as nominalism (Maree, & Van der Westhuizen, 2007). A nominalist view holds that the nature of reality is internally and subjectively generated by people (Maree, & Van der Westhuizen, 2007). Life can accordingly be understood from within, and a person's mind is seen as the origin of meaning (Nieuwenhuis, 2007, 2012a; Nieuwenhuis, 2016; Terre Blance, & Kelly, 1999). Regardless of the topic (phenomenon) studied, the researcher should select research techniques that will assist the understanding of people's interpretation of their lived experiences.

The second assumption flows directly from the first assumption and is related to the epistemological view held by interpretivist researchers. This study's epistemology reflects the theories of knowledge (philosophies) that was applied by the researcher in the creation of knowledge (Gringeri, Barusch, & Cambron, 2013). It thus frames the researcher's view on the origins, nature, and limitations of knowing reality thereby indicating the relationship between the knowledge or reality and the researcher (Reber, 1995; Terre Blanche, & Durrheim, 2006). According to Orlikowski and Baroudi (1991, p. 5), "[i]nterpretive studies assume that people create and associate their own subjective and inter-subjective meanings as they interact with the world....Interpretive researchers thus attempt to understand phenomena through accessing the meanings that participants assign to them".

Elaborating on the subjective view of reality, Mertens (2010) argues that the interpretivist researcher understands reality pluristically and therefore does not claim a single objective reality. Knowledge is hence seen to be derived from "multiple, intangible mental construction(s)", which are "socially and experientially based" (Guba, & Lincoln, 1994, p. 110). Reality is also dependent on context, and it is believed that studying people in their social contexts enhances our understanding of reality (Hussey, & Hussey, 1997).

Myers (1997) claims that interpretivism is oriented towards interpreting the uniqueness of a specific situation thereby contributing to the pursuit of contextual depth. The interpretivist researcher thus gains more knowledge by engaging in a subjective transaction with the participant (Guba, & Lincoln, 1994). The implication is that knowledge reflects the participant's goals, experiences, and history within the process

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of meaning making (Weber, 2004). Social knowledge is therefore a human product that is socially constructed and influenced by our knowledge of the social world (Nieuwenhuis, 2007; Nieuwenhuis, 2016). According to Weber (2004), understanding reality (truth) is a constant process through which the researcher explores particular phenomena starting with a pre-knowledge of reality and then discovering the interpreted meaning of the phenomena through the lived experiences of people. In doing so, the researcher continuously constructs and reconstructs reality based on his or her matching or mismatching of new data (Weber, 2004).

A third assumption of interpretivism relates to its research methods. According to Creswell (2014b), the interpretivist researcher prefers qualitative methods that rely on visual image and text data. Weber (2004, p. vii) claims that interpretivist researchers believe that methods such as "case studies, ethnographic studies, phenomenographic studies, and ethnomethodological studies" are the best ways to access visual and text data during interpretive research.

Fourthly, interpretivist researchers assume that their studies are valid when other researchers are likely to confirm their findings, thus seeing them as defensible (Weber, 2004). Mertens (2010) calls this a confirmability audit, which will be elaborated on during the discussion of the present study's quality criteria later in this chapter.

A fifth and final assumption of interpretivist researchers' is that their research is reliable based on their demonstration of interpretive awareness (Weber, 2004). They achieve this by indicating reflexivity in terms of which they, as researchers, acknowledge that they are part of the social world being researched and that this may influence the results of their research (Cohen et al., 2011). They accordingly continually look for alternative interpretations of the data relating to the research topic under consideration. Racher and Robinson (2003) argue that science should offer a more accurate description of the world and people's experiences by providing multiple interpretations thereof and that as researchers we are interactive in the exploration of the world.



Interpretivism is, however, not free from criticism, and it is just as important to understand the criticism or weaknesses of a paradigm as it is to understand its principles and strengths. In the following section, I discuss criticism of interpretivism.

4.2.2 CRITICISM OF INTERPRETIVISM AND THE NATURALISTIC APPROACH

Qualitative researchers in general and interpretivist researchers in particular have been criticised by researchers who view reality from a positivistic paradigm only (Kelliher, 2005). According to Cohen et al. (2011), some critics of qualitative approaches claim that such naturalistic approaches abandon the scientific principles of social research by allowing social roleplayers to dictate understanding of social phenomena. In terms of this perspective, social researchers are obligated to seek objective perspectives on reality (Rex, 1974).

Cohen et al. (2011) state that researcher subjectivity was for many years a major concern when studying phenomena from a qualitative perspective (Cohen et al., 2011). Bernstein (1974) maintains that the very process of negotiating meaning is in itself an invention derived from the contextual settings, making qualitative research a target for criticism. Berg (2001) defends the subjective nature of qualitative research stating that critics of such research tend to forget conveniently about the probability factor inherent in quantitative research practices.

Kelliher (2005) states that despite the recognition accorded interpretivist research for providing contextual depth, its results are criticised in terms of their validity, reliability, and generalisability. Angen (2000) maintains that currently there is unspoken agreement among researchers that the human experience cannot be understood in a reductionist way, yet the debate continues on how to deliver valid research results through qualitative research methods. Qualitative researchers have responded to this criticism in two distinct ways. Some have outrightly rejected any notion of being able to understand reality, while others have argued that contextual subjective views are critical in our understanding of the social world (Neuman, 2006).

Specifically in the health psychology context, Lyons (2011) highlights the slow but important shift in research for the inclusion of more qualitative studies. With positivism still being the dominant research paradigm in the medical environment, research done



from a decontextualised perspective (quantitatively) is often still preferred (Morse, 2010) as objectivity and measurable results are highly valued in a physical health setting where medical care is provided. Morse (2010) goes so far as to say that qualitative research specifically focused on patients' experiences is often unwanted from a medical perspective despite the fact that such "insider" information may remove a good deal of trial and error from medical practice. The reason given for this is that overt awareness of patients' experiences, as informed by research, may have a negative impact on the physician's professional judgement (Morse, 2010). It can, however, also be argued that attunement with patients' experiences is vitally important, especially in the rendering of psychological assistance, thus making qualitative studies particularly valuable from a holistic health care perspective. Marks and Sykes (2004) aknowledge the potential value of qualitative data in enhancing the quality of health care decisions when the research is conducted in a transparent, systematic, and replicable manner.

As stated earlier in this chapter, I concur with the view that the naturalistic (qualitative) approach to science does not need to be defended as an established research process (Weber, 2004; Wolcott, 1990 in Silverman, 2013).

4.2.3 METHODOLOGICAL PARADIGM (PLAN OF EXECUTION)

The present study was based on a qualitative research paragdigm, qualitative research being an umbrella term for all naturalistic studies (Nieuwenhuis, 2007; Nieuwenhuis, 2016). By choosing a qualitative method of inquiry, I indicated my belief that the research topic warranted in-depth exploration (Tracy, 2010). According to Myers (2000, p. 1), "[q]ualitative studies are tools used in understanding and describing the world of human experience". This type of research is not aimed at generalisability to the population in the same way as quantitative (positivist) research is (Falk, & Guenther, 2006; Myers, 2000; Nieuwenhuis, 2012a). Interpretivism is part of the qualitative research paradigm and is the most preferred – though not the only – theoretical approach in qualitative research (Goldkuhl, 2012).

The qualitative paradigm views reality as socially constructed, and its findings are created explicitly through the hermeneutical, dialectical and contextual interpretation



(Mertens, 2010). The qualitative methodological paradigm has the following key characteristics.

Qualitative research takes place in natural settings where the social phenomenon (behaviour) under exploration occurs (McMillan, & Schumacher, 2014). Data are thus often collected in the field or at the site where the participants experience the particular phenomenon (Creswell, 2014b).

Qualitative researchers need to maintain contextual awareness by considering each situation with the required sensitivity (McMillan, & Schumacher, 2014). Through the use of multiple data sources collected directly from participants, researchers using qualitative methods attempt to provide rich, in-depth, and descriptive narrative accounts of the participants' experiences (Creswell, 2014a; McMillan, & Schumacher, 2014; Nieuwenhuis, 2016). Qualitative researchers are therefore attentive to the personalised experiences of participants and attempt to understand participants from an "insider" perspective (Durrheim, 2006; Fouché, & Delport, 2011).

McMillan and Schumacher (2014) concur that the focus in qualitative research is on understanding participants' perspectives. Creswell (2014b) states that the qualitative researcher becomes a key instrument in the research process. Creswell (2014b) accordingly highlights the crucial role of reflexivity in qualitative research by its ensuring awareness of possible bias or personal values that may have impacted the research results. This assumes greater importance as the researcher may invest a lot of time as the primary research instrument in gathering the data needed for a rich description of the participants' experiences (Merriam, 2009).

Creswell (2014b) and McMillan and Schumacher (2014) state that a research plan cannot be too tightly described in qualitative research as the process is always emergent. The researcher may therefore be required to adapt data collection strategies in order to gain a better understanding of the research problem.

Another key characteristic of qualitative research is the inductive nature of its data analysis (McMillan, & Schumacher, 2014). Inductive reasoning limits the impact of any preconceived ideas that may influence data quality (Andrade, 2009). Inductive reasoning is a model of logic that claims that general principles can be derived from



specific observations (Babbie, 2005). The researcher therefore works with the specifics of the data in order to identify overarching principles. Creswell (2014b) argues that although qualitative research is predominantly inductive in finding comprehensive themes and data categories, deductive reasoning can also assist the researcher in revisiting data to determine if more data evidence can support research themes.

Lastly, qualitative research often needs to provide a complex understanding and explanation of a research topic from multiple perspectives (McMillan, & Schumacher, 2014). Creswell (2014b) calls this providing a comprehensive or holistic picture of research findings, which is crucial as the research needs to be judged in terms of its applicability in a given context.

4.2.4 JUSTIFICATION FOR THE QUALITATIVE CASE STUDY DESIGN

A qualitative case study design holds the potential to generate a rich, holistic contextual understanding of a particular phenomenon through the use of unstructured, non-numerical data obtained from participants in a natural setting (Creswell, 2009; Mason, 2002). At the same time, it can focus on answering what, how, or why questions (Rule, & John, 2011; Yin, 2014) making it especially suitable for exploring and describing human behaviour (Stake, 2005). As previously stated, the purpose of this study was to explore and describe the experiences of 12 TKR patients² at a private hospital in Pretoria regarding I-HOPE. From a research point of view, the best way to gain an in-depth understanding of how the 12 TKR participants made sense of their experiences of I-HOPE was to ask them to describe the experiences by means of their participant diaries and narrative accounts as communicated during the individual and focus group interviews. It is equally important to bear in mind that each participant expressed his or her experiences of I-HOPE in a unique way and that these experiences could be explored optimally using qualitative methods, which allowed for conversation and interaction with the participants and ultimately for viewing their experiences from multiple perspectives.

² The patients who acted as study participants, were interchangeably referred to as either participants or patients, where it was deemed fit to enhance meaning.



Another reason why a case study design was appropriate for this study was because it allowed for a holistic contextual understanding of the research topic. As mentioned before, each of the participants had unique experiences of I-HOPE intervention, and these experiences were most likely influenced by their unique circumstances (such as pain levels and recovery process), which had to be explored and described in detail to come to an in-depth understanding of how they experienced I-HOPE. Furthermore, the participants' experiences of I-HOPE were contextually bound by time and place in that the intervention was brief and done in an in-hospital setting – all of which are important factors contributing to our understanding of their experiences of I-HOPE.

The case study design also enabled me to answer the research question: How did hope theory inform a brief hope-based in-hospital intervention for 12 TKR patients? By using hope-theory during the descriptive element of the case study, I could review the existing literature on hope and hope intervention by following a deductive logical reasoning process. During this deductive process, an analysis of the literature led to the selection of a theoretical framework on which I-HOPE was based. This process is described in Chapter 3.

The study's theoretical framework also informed the exploratory component of the study in answering the question: What were 12 TKR patients' experiences of a brief hope-based in-hospital intervention at a private hospital in Pretoria? The theoretical framework assisted me in ordering, focusing, and directing the case while exploring the experiences of the participants.

As pointed out in Chapter 1, I-HOPE was unique in that it was the first described hope-based intervention in a TKR context, and it was also individually delivered in a hospital setting as a very brief psychological intervention. The novel nature of I-HOPE enabled me to integrate existing hope intervention literature and to explore its application through the framework of Scioli et al.'s (2011) integrative hope theory. This provided an opportunity to build on the existing theory. Building theory is a key characteristic of an exploratory case study design and was an important component of this study (Baxter, & Jack, 2008; Ponelis, 2015; Yin, 2014).

Understanding I-HOPE through the experiences of the participants was crucial in answering the research questions. I believed that by using a case study design, I was



best able to study the participants' experiences of I-HOPE within the natural process of undergoing knee surgery, without attempting to control the participants' responses thus contributing to a sound theoretical understanding of the research topic (Benbasat, Goldstein, & Mead, 1987).

4.2.5 JUSTIFICATION FOR THE INTERPRETIVE RESEARCH PARADIGM

The justification for the interpretive research design for this study is based on the interpretivist assumptions elaborated on earlier. These assumptions include the inseparability of people from their realities, the idea that a phenomenon is best understood through the meaning people assign to it, the preference for using qualitative data, including text, and, lastly, the assumption that research is valid if confirmed by other researchers.

The interpretivist research paradigm was chosen based on my view that the lived experiences of the participants were inseparable from their realities and were context-specific. By embracing the interpretivist view, I believed that each of the participants shaped their own reality through their subjective experiences. I realised that the experiences of the participants could be influenced by factors such as medical complications, social support, and pain. Whether the participants shaped their realities through interpretivism, be embraced to inform the research. Multiple perspectives were needed to enhance the interpretive quality of the study. By merely administering a questionnaire, I would have run the risk of missing the detailed descriptions of each individual's unique meaning making, which I considered important.

The aim of the study was to increase understanding of the participants' experiences of I-HOPE intervention while undergoing TKR. I viewed each participant's experiences as unique and interpreted them in a personally meaningful way. Such in-depth understanding could be possible only by focusing closely on the unique experiences of the participants and looking at the commonalities and divergences in their experiences. As the experiences of I-HOPE took place within the context of TKR, it was important to realise that the participants' understanding of this context could have had a direct influence on their experiences of the intervention. In obtaining contextual



knowledge, the research was not aimed at generalisation to a broader population. Through attaining direct feedback through the interpreted meaning of first-hand participant experiences the findings did however have the potential to contribute to our contextual understanding of the intervention.

In my opinion, in-depth understanding of participants' experiences can be achieved only through direct engagement with the participants themselves. Interpretivism as research paradigm acknowledges my role as primary research instrument. Based on understanding according to Weber (2004), I was able to reason interpretively by using my pre-understanding of hope intervention in the TKR context to facilitate the research process. This was because I could determine if my preconceptions matched the lived experiences of the participants in the study and, on the basis of this determination, refine my interpretation of these lived experiences to eliminate incongruences. Finding a match between the experiences and my preconceptions is needed to complete the interpretivist hermeneutic circle (Weber, 2004). Through my engagement with the participants and subsequent interpretation of their experiences, I could gain insight into their subjective experiences. The ability of other researchers to confirm these insights was facilitated by following a structured process of data verification, by close research supervision, by being reflexive during the research, and by ensuring an audit trail for my interpretive findings.

The information obtained through the interpretive research design held the potential to inform our thinking about hope-based intervention in a TKR context, expand our knowledge on the challenges faced by the particular participants, and learn what worked for them. Understanding this holds the potential to inform theory within this unique context.

4.3 RESEARCH DESIGN: CASE STUDY

This section deals with the case study design. The discussion will progress from a general discussion of the design to the specific application of the design as I defined the case study to have both a descriptive and exploratory component.

A case study can be described as a study method aimed at creating an in-depth and multifaceted understanding of a specific real-life phenomenon within a bounded



system and not seeking to generalise statistically from it (Creswell, 2008; Crowe et al., 2011; Thomas, 2011; Yin, 2009). According to Baxter and Jack (2008, p. 544), a qualitative case study "[p]rovides a tool for researchers to study complex phenomena within their context". Case study research is a well-established method of gathering information, especially in the medical and psychological fields (Berg, & Lune, 2012), and, according to Clark-Carter and Marks (2004), case studies focused on therapeutic interventions are often used in health psychology to improve the wellbeing and health of patients. It is therefore seen as a valuable method for developing interventions in health science research (Baxter, & Jack, 2008) as it can focus on one or more representative participants to increase understanding of particular phenomena (Nastasi, & Schensul, 2005).

Cohen, Manion, and Morrison (2000) list four components of a case study: it portrays, analyses, and interprets uniqueness of real individuals and situations through accessible accounts; it frames complex and situational behaviour; it contributes to action and intervention; and, lastly, it conveys reality by giving a sense of being present. Silverman (2013) argues that qualitative case study designs are analytically generalisable to theoretical propositions as opposed to generalisable to the population. In this study, I used a well-documented pioneering case study to explore the application of the hope theory of Scioli et al. (2011), making its findings analytically generalisable (Silverman, 2013). The case study was well defined in terms of purpose and theoretical underpinning while being aimed at answering specific research questions in a definite context.

The purpose of the present descriptive-exploratory case study was firstly to describe how hope theory could be used to structure I-HOPE for TKR patients and, secondly, to explore and describe the experiences of 12 TKR patients at a private hospital in Pretoria with regard to the intervention. As discussed in Chaper 1, this dual purpose gave insight into the research topic both from an intervention development point of view as well as from a TKR patient experience perspective. The case study was therefore discussed in two sections. Firstly, I described the design of the intervention by analysing text from existing literature in order to give a full descriptive account of the development of the intervention. Secondly, I wanted to provide an in-depth account of the participants' experiences of the intervention.



Babbie (2007) attributes the claimed weaknesses in case study research design to misunderstandings often based on divergent world-views. Flyvbjerg (2006) points out several misunderstandings surrounding case studies that have caused some researchers to hold them in low regard. The first is the view that general theoretical knowledge is more valuable than concrete case knowledge (Babbie, 2007; Flyvbjerg, 2006). Merriam (2009) addresses this misunderstanding by arguing that context is more valuable than claiming a universal understanding of a phenomenon. In response to another claim that a case study cannot contribute to science, Merriam (2009) argues that the value of a single example can be greatly underestimated and that the value of formal generalisation can be overestimated.

Further, critics claim that case studies are suitable only for generating hypotheses (Flyvbjerg, 2006). Merriam (2009) argues against this view. Responding to the claim that case studies are biased, Merriam (2009) argues that they are no less biased than any other form of research based on clear, preconceived ideas. Any research may therefore have the tendency to confirm the researcher's preconceived ideas (Babbie, 2007). It should be clear that these misunderstandings can be traced to opposing paradigms that have already been discussed in relation to the present study's research paradigm. In my opinion, these critical views to case study research ignore the vital importance of human interpretation and context by maintaining a philosophy based on finding a single objective reality to generalise to the wider population, which was not the purpose of this study. Flyvbjerg (2006) considers social science that is not based on properly executed case studies as ineffective.

The case study design was appropriate for this study because of its widely acclaimed ability to provide intensive research depth. It is also flexible in its unit of analysis, which can range from a specific individual to the study of a galaxy (Rule, & John, 2011). A case study can be adapted to include various methods of data collection making it versatile and often more manageable than other research methods such as large-scale surveys or research requiring extensive resources (Rule, & John, 2011). Yin (2009) maintains that a researcher's adherence to rigorous methodology is essential for the successful completion of a case study. This includes conducting a comprehensive literature review, posing thoughtful research questions or objectives, including criteria to ensure data quality, providing a chain of evidence, investigating rival interpretations, and being aware of the study's strengths as well as weaknesses.



This case study was designed using the three steps proposed by Yin (2012). As first step, I defined the study. In doing so, I determined what the study would be and decided on its boundaries (Baxter, & Jack, 2008). Secondly, I decided on the type of study I needed to conduct, and, lastly, I decided on how to integrate a particular theory in guiding the research process. I also decided to include five important elements in the study, namely the research questions, a master or guiding theory, a clear and defined unit of analysis, which allowed for the inclusion of subunits, logical linking of the data to the guiding theory, and criteria for interpreting the findings of the study (Yin, 1994).

4.3.1 DEFINING THE CASE STUDY

A case study can be used for research, educational, or action-related purposes in various contexts to enhance in-depth understanding in a specific context (Scholz, & Tietje, 2002). This case study aimed at enhancing research understanding in the specific context of providing I-HOPE by collecting appropriate qualitative data.

The literature describes different types of case studies, each based on its specific intentional use and the researcher's philosophical and methodological choices (Thomas, 2011). Scholz and Tietje (2002) suggest specific dimensions according to which case studies can be classified. The dimensions and their classifications used in the present study are tabulated below followed by a clarifying discussion.

Table 4.1: Dimensions and classifications of the case study (adapted according
to Scholz & Tietje (2002, p. 10)

Dimensions	Class	Classifications		
Epistemological status	Descriptive-exploratory	Descriptive-exploratory		
Design	Descriptive	Exploratory, embedded, single		
Motivation	Instrumental	Instrumental		
Purpose	Research and psychological pr	Research and psychological practice		
Data	Qualitative	Qualitative		
Format	Ground breaking	Ground breaking		
Synthesis	Analysis of related literature	Empathic		

A single case study is usually conducted in a way that respects the contextual environment of the case. Such a case study does not seek generalisability but, rather,



aims at providing in-depth understanding of a social phenomenon that may, or may not, be judged applicable, based on its context. It is also characterised by reflexive research rigour. A single case study design was justified as this case focussed on an unusual occurrence and could be revelatory in nature (Cohen et al., 2011; Yin, 2014). The uncommon aspects of the study were that it was situated in a specific in-hospital TKR context where the hope-based intervention was delivered and involved the unique, qualitative exploration of the participants' experiences. Similar interventions have usually been delivered during the outpatient stage of treatment and in a group context (not in-hospital and individually as in the present study). As no studies of this nature have been recorded among TKR patients before, this study can be described as a unique and pioneering occurrence.

In this study, it is acknowledged that the lack of a comparative dimension could be considered a limitation (Rule, & John, 2011). However, the study did not aim to provide categorical truths about the participants' experiences but rather to make hope therapists and other professionals in the field of TKR aware of the experiences of TKR participants in a brief hope-based in-hospital intervention.

In order to enhance the depth of the present study, various subunits of analysis were included (Thomas, 2011; Yin, 2014). As discussed in Chapter 1, the unit of analysis in the study was the development of I-HOPE for TKR patients and how I-HOPE was experienced by the participants. The case study thus included the experiences of 12 participants as embedded subunits in the study. Thomas (2011) calls this a nested case study as various subunits are fitted into a bigger unit, which provides a greater sense of integrity and wholeness to the research. This design enabled me to explore the research topic in a broader, yet connected way. Yin (2014) stresses the importance of the unit of analysis in a single case study design and urges researchers to guard against paying too much attention to any single subunit and thereby lose sight of the larger case. In the present study, the unit of analysis was the process of developing I-HOPE as well as the participants' experiences of the intervention (Ponelis, 2015). The data from the various subunits were thus used to obtain a more comprehensive view of the research topic.

Although the present case study might be of interest to those involved at the research site, it was seen primarily as an instrumental case. The difference pointed out by Rule



and John (2011) between intrinsic and instrumental case studies is that an intrinsic case study starts by identifying the research topic and then exploring problems in it. In this study, the problem of investigation was the first priority, before the topic was selected, making it an instrumental case study. Stake (1995) says that instrumental case studies are able to reveal findings not always apparent to observers. The research topic here was examined in order to provide insight into the participants' experiences of I-HOPE, which might inform further hope-based intervention research as well as the delivery mode of support to TKR patients (Punch, 2005). An instrumental case study focuses on a problem that needs clarification through description or exploration to inform the research audience and to inform or refine theory (Berg, & Lune, 2012; Merriam, 2009; Silverman, 2013). The present case study was both descriptive and exploratory in nature. A descriptive case study is used when a description of "an intervention or phenomenon is needed in a real-life context in which it occurred" (Yin, 2003 in Baxter, & Jack, 2008, p. 548).

Yin (2009) describes case study research as a linear interactive process consisting of planning, designing, preparing, collecting, analysing, and sharing. The present study followed these six distinct processes. The planning, designing, and preparation phases formed part of the descriptive component of the study, while the collecting of data, their analysis, and subsequent sharing constituted the exploratory component of the study.

Both inductive and deductive reasoning were part of the research process; however, the main thrust of the study was inductive in nature. Elements of deductive reasoning were, however, used to inform the descriptive component of the study in developing I-HOPE and relating participants' experiences to theory.

4.3.1.1 Descriptive case component

According to Rule and John (2011), descriptive case studies seek to answer what? and how? questions by providing a thorough description of the particular phenomenon. A descriptive case study often also requires a descriptive theory before the ontset of the research (Baxter, & Jack, 2008; Tellis, 1997). Through the descriptive design used in the present study, I focused on the development of I-HOPE as informed by hope theory and the literature on existing interventions. As mentioned



earlier, the theory of Scioli et al. (2011) was used to guide the intervention. A full description of this intervention is given in Chapter 3 including details on how it was influenced by existing literature.

Firstly, I consulted with various roleplayers involved with the TKR patients to get an idea of the unique challenges confronting them. This assisted me in planning the case study aimed at investigating the perceived needs of the participants. The roleplayers in the TKR surgery context included surgeons, previous TKR patients, nursing staff, ward managers, physiotherapists, and the executive hospital management. This initially took place during informal consultation processes and later during formal processes as it became clear that research in this field was needed. These consultations helped me move ahead with the design of the research.

As a next step, also seen as part of Yin's (2009) design phase, I reviewed applicable theories on the TKR process to understand the associated challenges and existing interventions. I also reviewed the literature on hope theory and hope-based interventions to conceptualise and design I-HOPE. The description of I-HOPE based on the integrative hope theory of Scioli et al. (2011) was seen as the part of the descriptive phase of the research (Phase 1). Apart from the descriptive component of the study, a further descriptive element was the description of the participants' experiences, which followed the exploratory component of the study. This exploration was also done in relation to the existing literature by means of a recursive literature review.

Yin's (2009) preparation process also involved obtaining ethical approval from the ethics committees of the Faculty of Education and the Faculty of Health Sciences of the University of Pretoria (Reference number EP14/03/02). During this preparation phase, continuous sharing and reflections between me, therapist, and research supervisor enhanced the quality of the research and the intervention. Time was taken to ensure that all documentation was in place and that consent was given by all the parties involved. Venues were negotiated in the hospital and orthopaedic practice to ensure the privacy and confidentiality of all the research participants and to ensure smooth processes as the therapist and myself worked in the hospital environment.



The descriptive component of this case study started with a literature overview of hope research that was gradually funnelled towards a description of the specific intervention. This funnelling included an analysis of existing hope-based intervention studies. During the analysis, the aim was to include only studies related to hope-based interventions in a medical context as inclusion criteria. In collecting relevant literature for the analysis used in the study, I examined manuscripts published between 1990 and 2014 in various computerised databases (e.g. PsycInfo, Medline, ProQuest). The criteria used for searching these databases included (a) Psychology and surgery, (b) knee replacement and psychological intervention, (c) knee arthroplasty, and (d) psychology and hope intervention. Regarding psychological assistance for TKR, PsycInfo produced 20 manuscripts, Medline produced 17 manuscripts, and Proquest produced non-related manuscripts on psychological assistance for TKR or related fields. On scrutinising these manuscripts, I realised that none of them described psychological hope-based interventions applied specifically in the context of TKR patients. My search was therefore broadened to include databases found on the website of Hope Research Central, Alberta, Canada (www.ualberta.ca/HOPE), the thesis and dissertation abstracts databasis, and general searches in Google Scholar. These broader searches included search terms such as hope, hope therapy, and hope counselling.

These strategies enabled me to identify 160 studies on hope in various contexts, which were narrowed down to 14 on the basis of the inclusion criteria of the study. A large number of studies were excluded because they were theoretical in nature only or compared hope to other psychological constructs and did not attempt to manipulate hope through an intervention based on hope theory. Although only 14 studies met the specific inclusion criteria, the related hope literature informed the descriptive study by providing an in-depth foundational understanding of hope, which was discussed in Chapter 2. The following table indicates how the study manuscripts were sorted into categories.

Category	Inclusion criteria	Number of manuscripts
Hope concept and theory related	Literature on only the concept of and/or theory behind hope.	33

Table 4.2: Study manuscrips sorted



General hope-based interventions	Hope-based intervenions that did not take place in a medical context as well as manuscripts on the role of hope during interventions.	20
Hope medical	Literature on the role of hope in a medical context.	36
Hope medical interventions (meeting the inclusion criteria)	Hope-based interventions in a medical context (specific hope-based interventions).	14
Hope development	Literature on the development of hope as a positive psychological construct.	12
Hope academic	Literature on the role of hope in an academic context.	9
Hope spiritual Literature on the religious or spiritual nature of ho		6
Other Literature on hope not relating to the above categories or that was less specific in nature.		30

Finally, I described how the intervention was informed by existing hope-based interventions from other contexts and how the guiding theory was applied to this study's I-HOPE.

I included a theory to guide the descriptive part of the case study, namely the theoretical understanding of Scioli et al. (2011) as pertaining to the intervention. This theory was used as an alternative to applying various other propositions to the study and enjoys a lot of support in case study research (Berg, & Lune, 2012). Yin (2014) claims that the theory can guide case study design and can also help in interpreting the meaning of data findings. Silverman (2013) points out that case studies cannot be generalised to populations but can be generalised to theoretical propositions. Yin (2003) supports a theory-before-research model, claiming that the use of theory has the following benefits: it deepens the researcher's insight into what needs to be explored; it guides a more comprehensive and appropriate description of the study; it often stimulates rival arguments and may even help researchers generalise their findings to theory.

The implementation phase of the research design (Phase 2) formed part of the preparation process of the present study but was not the focus of its research exploration. The therapist who delivered the hope intervention was trained by the researcher in hope theory and its implementation through I-HOPE. The therapist was a registered psychologist with the Health Professions Council of South Africa (HPCSA) and was supervised (also in hospital) by the researcher in I-HOPE during



2014. The therapist was given clear therapeutic guidelines and understood the theory and nature of the intervention (see Table 1.1 for a summary of the intervention).

4.3.1.2 Exploratory case component

An exploratory case study explores situations where the particular intervention has an unclear outcome (Baxter, & Jack, 2008). Thomas (2011) considers an exploratory design appropriate when a researcher is faced with perplexing issues or needs to know more about what is happening in an intervention. If the outcome of the intervention is not clear, an exploratory design is preferred (Thomas, 2011; Yin, 2003). The intervention therefore plays a major role in understanding a specific issue (Merriam, 2009). Babbie and Mouton (2001) propose the following goals when using an exploratory case design. It should satisfy the researcher's curiosity, test the feasibility of further studies, and determine priorities for future research (Babbie, & Mouton, 2001). As such an intervention has not taken place in a TKR context before, the exploratory part of this study was specifically shaped around the experiences of the participants. I believed this would inform future interventions and also contribute to the literature on hope-based intervention in a multiprofessional TKR context.

Eisenhardt (1989) argues that researchers should guard against overemphasising theories during exploratory research as exploratory cases can generate their own theories. Baxter and Jack (2008) point out that using a guiding theory during the exploratory research phase could be considered a drawback during inductive analysis. Exploratory case studies can yield better understanding of participants' experiences and can also lead to theory development (Yin, 2003). The exploratory research questions using a retrospective literature study in discussions of the data findings. This present case study provides insight into a new terrain (hope intervention for TKR patients) and, although it refers to related studies, still has ground-breaking elements (Scholz, & Tietje, 2002).

The processes of collecting, analysing, and sharing (Yin, 2009) formed part of the exploration phase of the research design (Phase 3) and are discussed later in this chapter (paragraphs 4.6 to 4.7).



4.4 BINDING THE CASE STUDY

After defining a case study, it should also be indicated what lies beyond the focus of the study (Baxter, & Jack, 2008). Yin (2014) suggests that the reseacher should set clear boundaries for the study in terms of time, social group, organisation, geographic location, and condition. To bind a case study, Rule and John (2011) state that the unit of analysis should be defined, which, in this study, included the topic that was explored, as well as determining the setting of the study and the chronological boundaries.

The present study's unit of analysis, as also previously discussed in Chapter 1, was, firstly, the development of I-HOPE for TKR patients and, secondly, how the intervention was experienced by the participants. The study was conducted in a private orthopaedic hospital in Pretoria in the Gauteng Province of South Africa. The descriptive part of the study focused on the development of the intervention. The study was chronologically bounded as it included the development period of the intervention from its inception in early 2012 up to its implementation in 2014.

The exploratory component of the study included only willing participants who met specific selection criteria between 1 August 2014 and 31 December 2014, that is, a total of 12 participants. The following section elaborates on the exploratory component of the study in terms of the selection of the participants, the selection of the research site, the data collection strategies, the data analysis and interpretation strategies, the quality criteria applied, and the ethical guidelines that were followed.

4.4.1 SELECTION OF THE PARTICIPANTS

Purposeful sampling was used to select the participants. Such sampling means that the researcher selects the participants as well as the research site intentionally in order to get to know more about an identified phenomenon (Creswell, 2014b). Because the research was conducted on a specific phenomenon, the participants were found in a specific context and had to meet specific criteria. Rule and John (2011) maintain that purposive sampling is needed in cases where not everyone can be included due to limited resources or the specific nature of the research.



The participants were selected on the basis of their relevance to the study topic (Gray, Williamson, Karp, & Dalphin, 2007; Silverman, 2013). I accordingly purposefully approached patients who were awaiting surgery at the specific in-hospital orthopaedic surgical practice and who also met the inclusion criteria for the study. I attempted to involve as diverse a sample as possible; however, I had no control over who was on the waiting list for surgery and therefore did not set any criteria in terms of race, social status, or gender. I did, however, realise that conducting the study in a private hospital might have influenced the demographic pool from which the participants were selected (see study limitations Chapter 6).

The following inclusion criteria were used to select the participants for the research: (a) patients who were due to undergo total replacement of a knee or both knees at the case study site (specific private hospital), (b) the surgery had to be performed by the same orthopaedic practice, and (c) the patients had to be willing to take part in the research, which included both I-HOPE and the data collection processes.

All the patients/participants who met these criteria were approached between 1 August 2014 and 31 December 2014 and had to be willing and available for both the hope-based intervention and the research itself. This time frame was determined largely by the availability of the therapist. The intake process continued for the duration of this period until my study supervisor and I were satisfied that data saturation had occurred thereby enabling the provision of a multifaceted and in-depth view of the research topic (Rule, & John, 2011). The participants were thus purposefully selected based on their availability and willingness to contribute to the study (Nieuwenhuis, 2010).

The following criteria were used to exclude potential participants from the research: (a) patients with a history of other co-morbid debilitating or life-threatening health problems, (b) patients who had experienced serious surgical complications that jeopardised their I-HOPE and research participation, (c) patients with diagnosed pathological conditions that qualified them for treatment under the supervision of a clinical psychologist and/or psychiatrist and (d) patients who were not able to understand English.



During the purposeful sampling process, the researcher used his knowledge of psychology to produce an appropriate study sample (Berg, & Lune, 2012). To enhance the value of the study, the sample selection was guided by the orthopaedic practice, which flagged potential medical risks. The patients were individually considered in terms of their suitability to participate in an exploratory case study such as this. An example is given below of a theatre list used for screening patient suitability. It was translated from Afrikaans to English for clarity purposes.

THEATRE LIST: Dr C

Time	THEATER 7 / LIST 1	THEATRE 8 / LIST 2
	MV – 07:00 start anaesthetics	MV – 11:30 start anaesthetics
07:00	Surname: XXX	Surname: XXX
	Name: XXX	Name: XXX
	Date of birth: 42/04/04 (72)	Date of birth: 49/03/27 (65)
	Tel: 082 XXX XXXX	Tel: 082 XXX XXXX
	Medical aid: Momentum	Medical aid: Discovery
	Member nr: XXX	Member no: XXX
	Authorisation nr: XXX	Authorisation no: XXX
	Risk: hypertension, depression	Risk: BMI-37
	Allergies: None	Allergies: None
	Internist: Dr. XXX	Internist: Dr. XXX
	Procedure: BILATERAL TOTAL KNEE	Procedure: RIGHT TOTAL KNEE
	REPLACEMENT	REPLACEMENT, & PATELLA BUTTON
	[0646X2, 0497X2, 0614X2, 0829X2, 0527X2, 0592X2, 0008, 0009, MOT]	[0646, 0497, 0614, 0829, 0527, 0592, 0009, 0009]
	ICD 10 : M17.0	ICD 10 :M16.0
	Assistant : Dr's XXX, Dr. YYY	Assistant: Dr's XXX, Dr. YYY
	Tyd: 3 hours	Time : 2 hours
	Prostheses: Journey II PS	Prosthetics: Journey II PS
	Sets: XXX	Sets: XXX
	X-rays: in file	X-rays: new required pre-surgical

Date: 6 AUGUST 2014 Place: HOSPITAL X



Some of the excluded patients presented with conditions such as deafness, hemiplegia, clinical depression, and Alzheimer's disease. Four patients also withdrew from the study of their own accord before the study commenced. Two of them withdrew without giving reasons while the other two withdrew for medical reasons – a severe bladder infection and continuous nausea. One of the participants who withdrew without giving a reason was later referred by the surgeon for alternative psychological assistance as it was thought she might have been struggling with an anxiety disorder, which would have disqualified her from taking part in the study. The abovementioned four patients met the exclusion criteria discussed in the previous section and were therefore no longer considered as participants in the study. Twelve was accordingly the number on which the basic frequency scores were calculated in Chapter 5 (n=12).

The following tables describe the patients/participants during the research period from 1 August to 31 December 2014. Patients wishing not to partake in the research or participants who withdrew from research are not listed in Tables 4.3 and 4.4.

	NAME CODE	ADMISSION DATE	AGE	GENDER	EDUCATION	RESEARCH INVOLVEMENT APART FROM INTERVENTION	INTERVIEWS PERIOD AFTER DISCHARGE
1	P1	5/8	50	F	Secondary	Participant diary Semistructured interview	7 weeks
2	P2	17/8	76	М	Secondary	Semistructured interview	7 weeks
3	P3	31/8	66	F	Tertiary	Semistructured interview	4 weeks
4	P4	31/8	58	F	Tertiary	Participant diary Semistructured interview	4 weeks and 5 months
5	P5	7/9	65	М	Tertiary	Semistructured interview	4 weeks
6	P6	14/9	70	F	Tertiary	Semistructured interview	7 weeks
7	P7	14/9	70	F	Tertiary	Semistructured interview	4 weeks
8	P8	21/9	64	М	Tertiary	Participant diary Semistructured interview	7 weeks
9	P9	19/10	65	F	Tertiary	Semistructured interview	4 weeks and 3 months

Table 4.3:	Participant	involvement details
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10	P10	19/10	67	М	Tertiary	Semistructured interview	5 weeks
11	P11	26/10	50	М	Tertiary	Semistructured interview	4 weeks
12	P12	9/11	66	М	Tertiary	Semistructured interview	3 weeks

Table 4.4: Participants divided into age and gender categories

Age group (years)	Treatme	Total number	
	Male participants	Female participants	Total number of participants
50 to 59	1	2	3
60 to 69	4	2	6
70 to 79	1	2	3
Total (N)	n = 6	n = 6	N = 12

4.4.2 SELECTION OF THE RESEARCH SITE

The research site was selected on the basis of it being able to give me access to a private hospital in Pretoria with an in-hospital orthopaedic surgery practice. The specific hospital and practice were chosen due to their philosophy of providing holistic health care and their willingness to accommodate the research. The surgeon expressed his awareness that psychological factors played a crucial role in his patients' perception of the success of TKR. In an interview with him he stated the following:

"...die realiteit is nie wat jy behandel nie, jy behandel die pasiënt se persepsie. Ek kan vir die pasiënt sê die x-straal is perfek en die been werk 100%, al die studies en toetse wat ek gedoen het is reg, maar as die pasiënt nie voel dat sy been beter is nie, is sy been nie beter nie" (Interview, 2015) (The reality is not what you treat, it is the patient's perception of reality. I can tell the patient that the x-ray is perfect and the leg is 100% functional, yet if the patient doesn't feel that way, then the leg has not improved.)

The particular hospital was also well known for its excellent nursing staff, modern technology, and high health care standards. The excellence of the hospital was confirmed by clinical hospital authorities not directly associated with the hospital.



The practice and hospital management agreed to provide private rooms for I-HOPE and the individual interviews. It also accommodated the work of the therapist, provided that physical health care services were not compromised. These conditions made the hospital and practice a responsible choice for pioneering research such as this. A public hospital was not considered due to budgetary constraints affecting service delivery, and especially affecting orthopaedic procedures such as TKR, and a lack of private facilities for the intervention (Bloom, 2012; Shorter waits for hip and knee surgery patients, 2015). This might, however, have affected the demographics of the participants and constitutes a group that is privileged in terms of accessibility to medical services in South Africa.

4.5 DATA COLLECTION

In order to enhance the quality of the qualitative data, multiple data sources were used in the study (Nieuwenhuis, 2010; Yin, 2012, 2014). These included participant diaries, individual semistructured interviews (roughly one month after surgery), the focus group interview with the participants (roughly four months after surgery), and the researcher's reflective journal. These sources are discussed below to show their contribution to the quality of the data collected during the study.

4.5.1 PARTICIPANT DIARIES

Hamilton and Corbett-Whittier (2013) believe that encouraging participants to keep reflective diaries can provide an enhanced view of their inner world and thus the personal aspects of their experiences. The participants in this study each received a participant diary at the start of the research on their admission to hospital and were requested to diarise their experiences throughout the entire TKR and hope-based intervention process. The participant diaries were specifically aimed at the period from admission up to their first interview (approximately one month later). These reflections could take place in an unstructured way in order to provide context to the study findings and create in-depth understanding of how hope was influenced during the inhospital process. The diaries were handed to me during the individual interviews one month after surgery.



Some of the participants found keeping the diaries hard for a variety of reasons including fatigue and complications after surgery while in hospital and/or at home during the recovery process. The participants who did not complete the reflective diaries were afforded the opportunity to give a verbal reflection guided by me during the individual interviews. Some of the participants opted to email their reflections to me at a time convenient for them. Onwuegbuzie et al. (2010) consider computer-mediated data collection an effective way to collect data, while Silverman (2013) considers it an excellent source of document data.

4.5.2 INDIVIDUAL SEMISTRUCTURED INTERVIEWS

Semistructured interviews have been described as being among the most powerful and effective ways to understand people and their conditions (Berg, & Lune, 2012; Fontana, & Frey, 2000). Interviews have long been the most popular way to gather qualitative data (Rule, & John, 2011; Seabi, 2012). The richness that such data can yield is a key consideration in conducting participant interviews (Hamilton, & Corbett-Whittier, 2013).

The semistructured interviews³ in the present study were conducted one month after surgery and took place in a private room in the hospital next to the surgeon's consultation rooms. The decision to conduct these interviews one month after surgery was because they would then coincide with the patients' one-month follow-up consultation with the surgeon. The interviews were guided by a set of predetermined structured questions that were followed by unstructured questions based on the related discussions making them semistructured interviews (Rule, & John, 2011). Following the guidelines of Seabi (2012), the interviews were neither fully fixed nor fully open and were therefore more flexible than structured interviews while still provided for natural conversational flow during the interviews (Robson, 2011). The interviews were between 20 and 60 minutes long. Apart from two occasions where the participants chose to be interviewed at home, the interviews usually coincided with the surgical follow-up appointment dates to prevent unnecessary travelling by the participants.

³For a schedule of the semistructured interview see Appendix B.



I agree with Murray and Chamberlain (1999) that interviewing people with physical health challenges is a powerful way to provide a safe space to describe the psychosocial impact of these challenges. Such interviewing is central to the illness/health journey that shapes their experiences and, as interviewer, I had the unique privilege to validate these experiences (Murray, & Chamberlain, 1999). As interpretive researcher, I was an integral part of the research process as the primary instrument of research. During the interviews, I communicated the importance of the participants' contributions to them. I also valued the participants as the experts in sharing their experiences with me looking on as an outsider wanting to gain understanding (Hamilton, & Corbett-Whittier, 2013). In my view, giving credit to participants as the experts in their experiences limits the likelihood of their giving responses they believe the interviewer (as expert) will want to hear, thereby making the interviews more credible (Silverman, 2013).

My observational notes were kept throughout the semistructured interviews and were incorporated into the transcribed interviews to provide non-verbal information as observed during the interviews. This included notes on observed facial expressions and additional body language – the notes were added during the interview transcription process to provide further information for the data analysis thus enhancing the interpretation of the participants' experiences.

The semistructured interviews were held before the focus group interview to obtain indepth baseline knowledge of the topic that could be used to inform the follow-up focus group interview (Gaskell, 2005). Through these interviews, I hoped to obtain a greater sense of the participants' subjective realities, enabling me to ask questions during the focus group interview that could further enhance understanding of their experiences. Through this came the idea of asking about the process leading up to TKR during the focus group interview – this process did not form part of the data collection for the present study but might well be a topic for investigation in follow-up studies.

4.5.3 FOCUS GROUP INTERVIEW

The aim of the focus group interview was to enable the participants to talk and respond to each other in comparing their experiences, reacting, and contributing to what the others said (Gaskell, 2005). According to Gaskell (2005), a focus group



interview can produce spontaneity, creativity, and even humour in the participants, which can lead to unique insights. According to Liamputtong (2011), a focus group can be seen as a dialogue involving a group of carefully chosen individuals on a predetermined topic.

Initially, at least two focus group interviews were planned to take place roughly three months after surgery as the medical staff considered this a milestone in TKR recovery characterised by greater independent mobility. However, the focus group interview took place approximately four months after discharge from hospital, during which the participants discussed their experiences of the hope-based intervention in the TKR process.

Literature indicates that the ideal size for a focus group is between 6 and 12 participants (Johnson, & Christensen, 2004; Rule, & John, 2011). I accordingly attempted to involve all the participants in the focus group interview, but, unfortunately, only a few of the participants responded to the request to take part. Silverman (2013) refers to the problem in social research of unresponsive participants.

29 January 2015: I am really struggling to get participants to attend the focus group interview. All are busy with their own lives and things, they have moved on and have busy lives, with work, loved ones and friends to attend to, so I do understand and it is not as if they all have a doctor's appointment again to come to [C] (Researcher's diary, comment U1260, p. 209).

Even after inviting all the participants and rescheduling the focus group interview to accommodate as many of the participants as possible, only four of the participants were able join me for the interview, which met the criteria for a mini-focus group (Guest, Namey, & Mitchell, 2013; Morgan, 1997). Krueger (1994) considers a mini-focus group effective when the members of such a group have specialised experiences to contribute to the focus group discussion, as was the case with the min-focus group in this study. With hindsight, it may have been a mistake to schedule the focus group interview for three months after surgery as by then the participants seemed to have settled back into the normal busy routine of life. Most of them indicated they were too busy at work or with family responsibilities. One said that he was on an extended holiday, and three said that it would be too far for them to travel.



Gaskell (2005) states that a disadvantage of a focus group is that the participants are self-selective and that it is difficult to recruit busy respondents to such a group. One focus group interview eventually took place and lasted approximately two hours, in line with the recommendations of Morgan (1997). At the request of the participants, we were joined by the therapist for the last 40 minutes of the session as they wished to thank her personally for the time she had spent with them. The interview data during her presence were not used in the research findings as she might have had an effect on the participants' responses. The session was an open-ended inquiry on the participants' experiences of the hope-based intervention and the TKR process, including the experiences leading up to TKR as well as their experiences in the hospital while receiving the brief hope-based intervention. The participants could freely engage in an unstructured interview setting to talk about their experiences.

4.5.4 AUDIO RECORDINGS

Audio recordings were made of all the semistructured interviews and focus group discussions as it was thought they could contribute towards enhancing data quality and reliability and creating a clear audit trail for the research (Silverman, 2011).

4.5.5 RESEARCHER'S REFLECTIVE JOURNAL

I also kept a reflective journal during the research process, which was scrutinised to create a more in-depth, reflexive, and holistic understanding of the contextual factors potentially influencing the research topic. The reflection process gave me an in-depth and holistic view of potential factors influencing the research and provided contextual grounding for the data interpretation. The journal was kept mainly through the use of voice notes on a dictaphone that were later transcribed for document analysis. The journal provided additional contextual information on the hospital's ethos, the participants' profiles, the physical setting, and occurrences/incidents during the research, as well as observed reactions during the data collection (Hamilton, & Corbett-Whittier, 2013).



4.6 DATA ANALYSIS AND INTERPRETATION

As previously mentioned, the study included a combination of deductive and inductive reasoning in the data analysis process where inductive reasoning was used mainly in the exploratory design as the main thrust of the study. In order to describe the theoretical development of the hope-based intervention elements of the study properly, a deductive reasoning process was also needed. The deductive reasoning components were reflected in the extensive literature review and the analysis of the hope and hope-based intervention literature from which a theoretical framework was derived for I-HOPE. The aim of the deductive research process was merely to inform and subsequently develop the hope-based intervention. As discussed in Chapter 1, the intention with this study was not to test the intervention in a deductive quantitative manner. Instead the experiences of the participants in receiving I-HOPE during the process of TKR were considered in a mainly inductive manner. This inductive process enabled me to immerse myself in the experiences of the participants and to follow a bottom-up approach. Only after immersing myself in their experiences and identifying possible themes, a deductive thinking process was followed in that I related my findings back to the master theory of the study. As such I considered the themes relationship to attachment, mastery, survival and spirituality (Scioli et al., 2011) and was able to adopt a coding system similar to that of Scioli et al. (2015) to describe some of the identified themes. The following diagram illustrates the deductive and inductive logic processes followed in the study, after which I elaborate further on the core inductive component of the study.



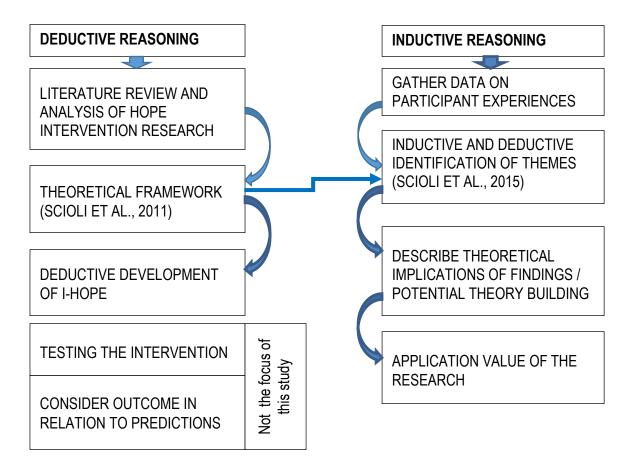


Figure 4.1: Inductive and deductive logic in the study

After the data had been collected, the meaning of the case study had to be interpreted. An inductive thematic content analysis was accordingly done to find categories of meaning in the data, which were identified inductively (Goussinsky, Reshef, Yanay-Ventura, & Yassour-Borochowitz, 2011). An inductive analysis moves from the specific to a general rule implying that the transcribed data were analysed in order to produce categories and themes of meaning (Rule, & John, 2011). I used the analysis model described by Creswell (2014a) to arrive at verifiable descriptive research findings (Figure 4.2):



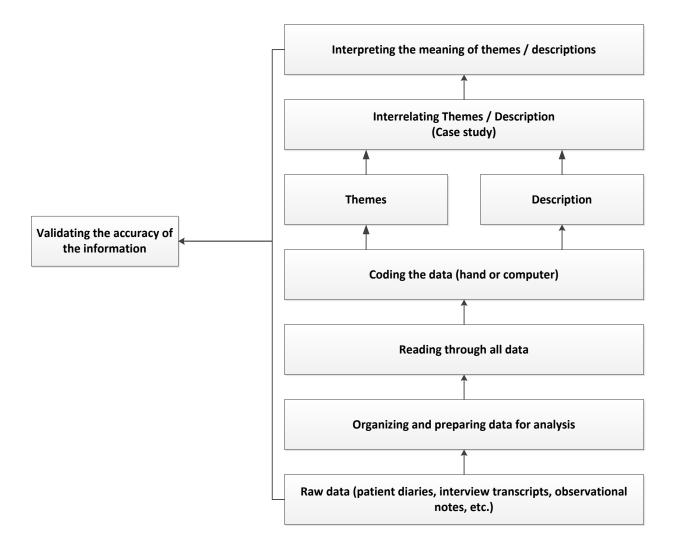


Figure 4.2: Data analysis adapted from Creswell (2014a, p. 197)

A contextual understanding of the participants' views was considered a key component of the data collection and analysis processes. The data analysis was a continuation of the process of relating to the participants empathetically, enhancing the level of their commitment to the research process, and allowing natural and spontaneous engagement throughout the research.

The very personal nature of the data collection process and perceived vulnerability of the participants in the process, called for a continuation of respectful and ethical conduct during the data analysis.

The raw data were obtained through the data collection methods discussed. This entailed a comprehensive interactive process during which I was personally involved in accessing the in-depth experiential views of the participants. The raw data were



subsequently ordered and transcribed in preparation for the document analysis. Rule and John (2011) stress the importance of developing a system in which the collected data can be organised. The recorded and transcribed interviews were kept electronically in order to enhance the verification quality of the data.

I carefully read and reread all the data bearing in mind Silverman's (2013) advice that a case study does not analyse individuals but looks for social relations – it does not attempt to generalise the findings to the population but, rather, to relate them to a theory. Only after I had immersed myself fully in the data was I able to start the extensive process of coding the data, which involved assigning labels as I sorted the data into different parts that belonged together (Rule, & John, 2011). Hamilton and Corbett-Whittier (2013) refer to this coding process as the reduction of data and consider it helpful in understanding a mass of data. I, at first, did this by hand, in a sense playing with the data and searching for patterns that might emerge (Yin, 2014). After the data had been refined to clearer categories, I used Microsoft Word's labelling function to capture the themes and categories. I preferred this to using other electronic analysis programs with which I was not familiar. Rule and John (2011) describe the potential of such an analysis in a case study to develop theory as part of an exploratory design.

The following are a few examples of the participants' research journals used as raw data during the research process.

Longure by die shool, sy 15 die r bondag 15 Sept engate een wat my program Die Skool bel connexpor Konwerk, ordat sy my altyd en onder wil holp, nou is sutther al succe met skatistiete wat ek in n dag doen Ek sol ons althree suche of melar more 3 un goon, don 15 die Hoof nie ober nie en Ex beat ex most affluit en my ex will hom me sien gedagtes weghow von Jaci plek en sy mense, anders Dinsdog EK het gegoon, my mar nie gelukig rie. Die mit vir Hoffe en as int verkeerd is goon ek goon et nie gesond word nie. Et boklei on emosioned sterk te bly. Die Dame verteil vir almat, al hoekom ek en l. X sukkel on dit reg tekny. EK Kon lonk sit moor as ex , al hockom et so lank of geboek word is orndat 15 dit seer en styf. 2) et nie my beteringe doen Moondag 22 Sept Dit voel net of eknie verbeter nie nie. + As remared will weet wat is my seerpletike bly seer en my die aanslae van die Bose, Knieg bare styl no befeninge EK droom gereeld von die skool dit is dit :- er bo! en toor goon me is dog verby

Figure 4.3: Participant diary, example 1



IN) DEV SIPA dis die plek met opit mens planeet 19 wadr WERS Hospitaal Wer my SKOOL SE pontoe Sal 005 net biet GOOL

Figure 4.4: Participant diary, example 2

These documents were translated from Afrikaans to English where applicable in the verbatim transcripts during the data analysis chapters.

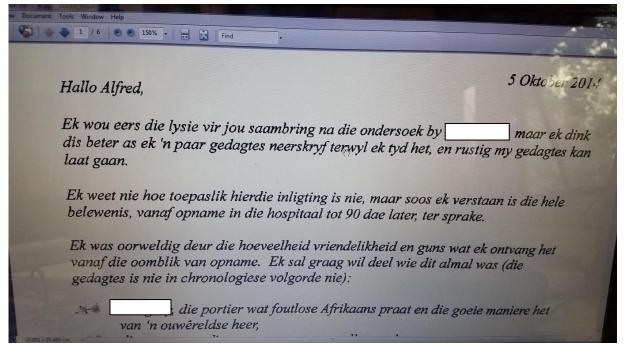


Figure 4.5: Electronic participant diary, example 3

This document was translated where applicable in the verbatim transcripts during the data analysis chapters.



Comments:

- 1. I found the intervention to be a very refreshing approach to the TKR
- To understand the state of the patient's mind and physical healing of the body af operation, particularly a TKR, was for me an absolute eye opener
- I didn't realise it but I was actually tense about the operation. My shoulders had g slight spasm and I had started a tension headache
- 4. However, the time spent with made a big difference to my state of mind and I more relaxed by the time she left

The Operation:

- 1. The theatre staff were very warm and made me feel relaxed before the anaesthetic.
- The TKR went well and my healing process has been remarkable, however I vaguely
 remember coming around in High Care, my wife told me that it took me just on an hou
 before Loaid anything to her. I felt that the anaesthetic was stronger than normal
 here is an in High Care.

Figure 4.6: Electronic participant diary, example 4

During the interpretive qualitative data analysis process, the steps described by Cohen et al. (2011) were followed as the pieces of the text had been inductively coded. As I worked through the extensive data, I identified portions of data that had specific meaning, which I then coded during an open coding process (Rule, & John, 2011). During the open coding, new labels were attached to pieces of text, describing and categorising them. In analysing the described codes, I was able to interpret the data through examination, comparison, and conceptualisation. Each label was given a code, which was included in a codebook with a description of its meaning (Rule, & John, 2011). I started off by reading each subunit's data to identify emerging categories to get a sense of the data. After I was able to decide on appropriate codes, I then coded the data in an integrated way (Rule, & John, 2011). Hamilton and Corbett-Whittier (2013) consider it helpful to tabulate the categories or themes in order to better understand the data. Below are examples of the tabulated coding process.



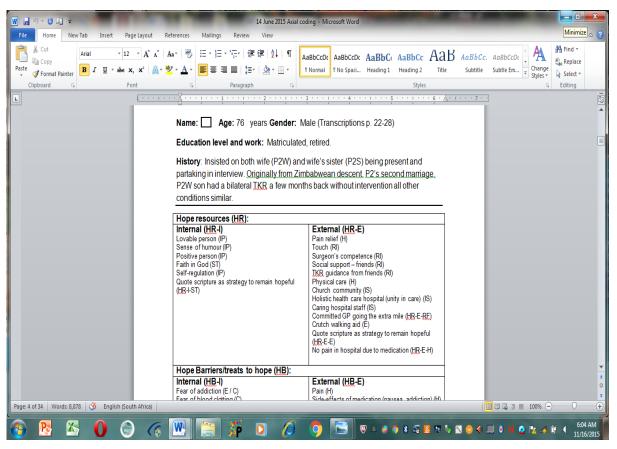


Figure 4.7: Tabulated conding process, example 1

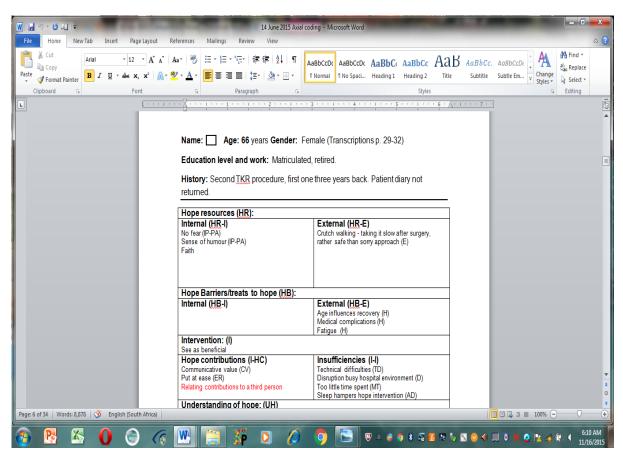


Figure 4.8: Tabulated conding process, example 2



Below is an example of the open coding process of the integrated data document.

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1	· · · 6 · 人 · · · · · 7 · ·						
2711 head ace and I didn't have anything to ease that, you know like a							
2712 Compralle (head ace tablet) or something like that, but by the time E	Comment [U539]: HB-I-C: Fear of big surgery						
2713 (therapist) have left my head ace was gone and my shoulders had							
2714 relaxed, that is the only difference I felt before and after the intervention.	Comment [U540]: I-HC-ER: Release of tension-						
2715 Had I been very depressed, and say to it that there was a big shift, but	felt on a physical level (headache disappeared)						
2716 for me as a person the shift was only because of my tension head ace							
2717 and pain in my shoulders that left.							
2718 R: (Reflects on hopefulness of the patients). How did the intervention	2718 R: (Reflects on hopefulness of the patients). How did the intervention						
help you to set goals during your surgery?							
2720 N8: No, no. You know I think maybe the time spent with E (therapist)							
2721 was too short, I don't think she was able to we just spoke, she wanted	Comment [U542]: I-I-G: Inadequate goal setting support due to time constraints						
2722 to show me the DVD, but we really just communicated, but from there	Comment [U543]: H-TD: Technical difficulties						
2723 you sleep, and you wake up and you go to theatre so you really don't	Comment [U544]: I-HC-PV: Communicative						
2724 have time to think of any goals and I didn't personally have any goals	Comment [U545]: I-I-G: Inadequate goal setting						
just wanted to get it over with. If that is a goal, I wanted to get it over	support due to time constraints						
2726 with.	Comment [U546]: IG-HG: Getting through the TKR proces						
:81 of 212 Words: 81,464 🕉 Afrikaans							

Figure 4.9: Open coding process, example

Through inductive reasoning, I was able to derive a thematic frame for understanding the interpreted data (analytical coding), while axial coding was used to group codes containing similar thematic meaning together. Thematic patterns were identified, coded, and grouped into thematic categories (Fielding, 2008; Guest, MacQueen, & Namey, 2012). This process was comprehensive as it involved combining and recombining the codes in terms of their causal conditions (events, activities, behaviours) (Cohen et al., 2011). The data were reconstructed in new ways after re-examination, and selective coding was used to relate the categories systematically to establish core thematic data categories, which made it possible to compare these categories with existing theory and to integrate, expand, or reject them (Cohen et al., 2011; De Vos, 1998).

As mentioned earlier the inductive analysis was combined with a deductive process. In constructing the themes, the inductive themes were related to the emotional network of hope via the channels of mastery, attachment, survival, and spirituality as



manifested through the participants' experiences of I-HOPE. Themes were therefore identified if I-HOPE was linked to hope experiences in the TKR process; they were not identified if the participants simply referred to the TKR process in general or to other sources that they perceived to be supportive of hope. The following definitions were used in guiding me during the deductive part of the analysis to relate the thematic findings with:

Attachment benefits

The advantage gained from an emotional bond based on openness, trust, and emotional support from people offering kindness and companionship in a nurturing relationship (Scioli et al., 2015; Scioli & Biller, 2009; Scioli & Biller, 2010).

Mastery benefits

A person's perceived level of control as response to stressful circumstances associated with gaining control and dominance over the stress experience (Scioli et al., 2011; Younger, 1991).

Survival benefits

Survival is defined as the continuation of one's ability to self-preserve and take part in life; this may include emotional and physical regulation and generating options through the self or others (Scioli & Biller, 2009; Scioli et al., 2015).

Spiritual benefits

Benefits associated with a person's quest for a higher meaning and/or belonging in expressing his or her core values and may include any form of religiousness or spiritual expression related to receiving strength from God's connected presence, being reminded of the goodness of the universe, or setting a lasting example of courage/dignity (Scioli et al., 2015; Sperry, 2001; Weisman de Mamani, Tuchman, & Duarte, 2010).

In this regard, four of the five themes were thematically described using the four channels of hope as described by Scioli et al. (2011, 2015), while one theme, namely Acceptability of I-HOPE, could not be related to this theory. In Chapter 5, the definintions of these these themes will be translated into inclusion and exclusion criteria. The data allowed me to develop a thorough case study description as



suggested by Yin (2014) in that theory were allowed to guide the meaning of the discovered data.

4.7 QUALITY CRITERIA

To ensure quality data in the research, I started by acknowledging my role as researcher after which I described how I had attempted to adhere to the four basic aspects of trustworthiness as listed by Guba (1981) for a naturalistic inquiry, namely credibility rather than internal validity, transferability rather than external validity or generalisability, dependability rather than reliability, and confirmability rather than objectivity.

4.7.1 MY ROLE AS RESEARCHER

It was ethically important for me to be aware of my own potential influence on the study data. Rule and John (2011) refer to this as the researcher's positionality. As a qualitative interpretive researcher, I acknowledged that it would not be possible for me to remain totally objective during the research process. As I had developed the hope-based intervention and had been working as a therapist at the hospital, there was the possibility that the research results could be influenced by my previous experiences as a therapist working with TKR patients in an in-hospital context. As I wished to remain as impartial as possible during my interpretation of the data, I took the reflexive process followed in the research very seriously and often challenged my personal relation to the data interpretation in my researcher's journal.

25 February 2015: I am honest when I say that I do not feel that I am going to be subjective during the coming data collection process. At the same time, it is my belief that the nature of reality is an internal one and that I personally construct meaning. For this reason, I will remain aware that I should repeatedly acknowledge my own possible bias and often seek supervision in the process of interpreting data. [C]. (Researcher's diary, comment U1261, p. 211).

Despite my viewing myself as unbiased and objective, Robinson (2002) states that subjectivity often takes place unknowingly. Therefore, to enhance my ability to remain



as objective as possible, my supervisor urged me to distance myself from the intervention process and arranged for an independent psychologist to deliver I-HOPE. As role duality is more difficult to negotiate as an insider, distancing myself as researcher from the intervention process as far as possible had distinct benefits for objectivity. This was also an ethical requirement that will be discussed later. At no stage during the research process was I therefore required to play a dual role in respect of the participants.

My research journal records this process as follows:

Substitution of the stand back as therapist, I had to let go of my assumptions of what such an intervention offers and look at such intervention from the other side. At first, I found it challenging to let go, but soon I realised this was a great day...I felt liberated. I was not invested in any result, I was able to observe and listen and learn...[C] (Researcher's diary, comment U1256, p. 199).

4.7.2 **CREDIBILITY (TRUTH VALUE OF RESULTS)**

An important issue requiring close attention during the study was the triangulation of the data. Following the guidelines of Patton (2002b), triangulation was established through the use of multiple sources of data, obtaining consensus among evaluators, and by relating the data findings back to theory.

To ensure the significance of the results and their credibility, the study made use of a data audit trail allowing the analysis thereof to be assessed by external researchers (Di Fabio, & Maree, 2012; Rule, & John, 2011). I further clarified important theoretical, phenomenological, and data analysis strategies in order to ensure that alternative interpretations of the data could be monitored and reported on. This included managing the alternative coding or interpretation of derived themes with my supervisor through a process described by Guest et al. (2012) as intercoder agreement.

16 June 2015: I was surprised and relieved to see my interpretation of the data categories showed similarities to that found by my supervisor and a peer reviewer. I find it remarkable that slight changes in defining the categories



made so much difference in understanding an interpreting them. [C] (Researcher's diary, comment U145, p. 23).

An important strategy followed was that of member checking after the preliminary data analysis. Member checking occurs when participants are able to validate researchers' interpretation of data (Hamilton, & Corbett-Whittier, 2013; Rule, & John, 2011). Member checking was used in the present study to determine the accuracy of the qualitative research findings – the participants had the opportunity to provide feedback and confirm or question my interpretation of the data (Creswell, 2014a). Hamilton and Corbett-Whittier (2013) believe that member checking should be included as a legitimate part of the analysis, allowing the member checking process to inform the process without controlling it. Although not all the participants were able to participate in the focus group session all were given the opportunity to respond the my initial interpretation of the data, as they all also received the interpreted results electronically and were approached by me to comment on them. The following are examples of emails sent to the participants in terms of the member-checking process.

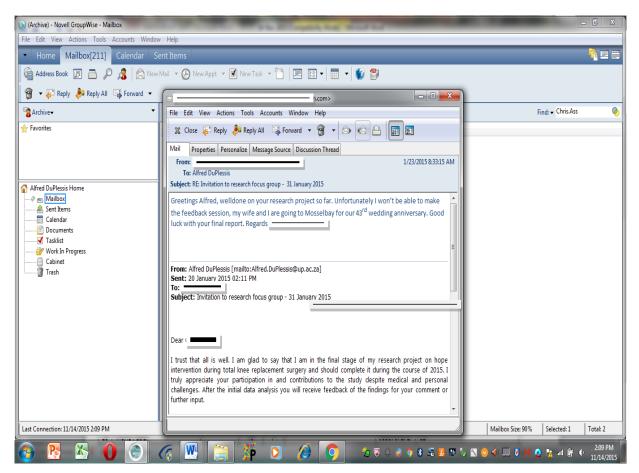


Figure 4.10: Member checking, email 1



(Archive) - Novell GroupWise - Sent Items						
File Edit View Actions Tools Accounts Window Help						
 Home Mailbox[211] Calendar Se 	nt Items					
Address Book 🗊 📇 🔎 🧟 🖄 New N	Aail 🔻 🕗 New Appt 👻 🕑 New Task 👻 🎦 🛛 📰 🕄 🗮 📰 👻 🇊 🖤					
🖳 Pending Requests 🛛 🗐 Connection Log	🖙 (Archive) - Mail From: Alfred DuPlessis	🛃 Delete Sent Item 🛓				
archive-	File Edit View Actions Tools Accounts Window Help	Find: 🗸 bretthoa 📀				
🔶 Favorites	🕱 Close 💭 Reply 🦂 Reply All 🕞 Forward 👻 😭 💌 😒 🌚 🔚 📰	Rep Folder				
	Mail Properties Personalize Discussion Thread	Alfred Du				
	My Subject:					
Alfred DuPlessis Home	My Notes:					
& Mailbox A Sent Items	· · · · · · · · · · · · · · · · · · ·					
Calendar	Category: Edit Categories Contacts:					
Documents	Subject: Alfred du Plessis - research feedback					
	Dear Mr. L					
Cabinet	I trust all is well. I know not everyone is interested, but I never the less include a brief overview of my					
5	preliminary research results for your information.					
	Kind regards,					
	Alfred du Plessis					
	×					
	Message Data overview I					
		Mailbox Size: 90% Selected: 1 Total: 2				
🚯 🖪 📉 🚺 🕞 🤇	G 🔣 📋 🥻 🖸 🖉 🕥 🗇 🕫 🖬 🛚 🖉 🖉	🗸 😒 📀 📣 💻 🦁 Ν 🧟 🗽 📶 🛱 🔶 2:12 PM 11/14/2015				
		11/14/2013				

Figure 4.11: Member checking, email 2

Prolonged field engagement (five months) and ongoing observations during the data collection were used to strengthen the credibility of the research process (Ebersöhn, Eloff, & Ferreira, 2012). Lastly, I valued reflexivity by having regular in-depth discussions with my supervisor on the research process and by ensuring that I kept a research journal during the process. The journal reflected my personal thoughts during the research and showed how my perception and methods had developed and had been adapted.

4.7.3 DEPENDABILITY

Dependability refers to the possibility of the replication of a study's findings (Babbie, & Mouton, 2001; Merriam, 2009). Potential personal bias was seen as a threat to the stability or dependability of the present study (Cohen et al., 2011). Acknowledging the possibility of my own bias as well as constant reflexivity in my researcher's journal helped me limit my subjectivity.

I also used multiple data sources during the data collection. Not only did the case study have multiple participants, I also accessed their experiences in three different



ways by including the participants' diaries, the individual semistructured interviews, and the focus group data-sourcing strategies.

Dependability was further promoted through strategies such as noting research decisions, doing data checks with the participants, and using an independent coder, as suggested by Nieuwenhuis (2012b). I further refrained from becoming involved in the intervention process and remained independent to counter any potential bias in the research results. Another measure to counter bias in the study was ongoing close supervision with regard to the findings of the data analysis.

4.7.4 CONFIRMABILITY

Confirmability refers to whether an outsider would be able to confirm a study's data results. According to Lincoln and Guba (2005), confirmable results reflect participants' views. To maximise confirmability in the present study, I continuously made use of verbatim quotes of the participants to support my interpretation of the data. Audio recordings and observational notes made during the interviews assisted in the transcription of the data, which later facilitated their confirmation. The data were also confirmed during the member-checking process.

Because this study dealt with participant perceptions and the creation of personal meaning in a specific contextual system, objectivity was not the main aim of the qualitative part of the study. Instead, I attempted to allow thick descriptive data to inform the presented findings (Creswell, 2014a). The "crystallised" data findings could be monitored through external observation of the data analysis process. Crystallisation as proposed by Richardson (2000 as cited in Nieuwenhuis, 2012b), provided a deeper understanding of the data. The findings emerged in this study through various datagathering strategies and I confirmed the interpreted perspectives through both member checking and peer review (Rule, & John, 2011).

In a further attempt to ensure the study's confirmability, I used a reflexive process involving a researcher's journal (Seale, 1999). I used my journal to reflect on the research process as well as on my research decisions. I further reflected on my awareness of the need to manage my own potential personal bias and any assumptions that might have been present during the research process.



4.7.5 TRANSFERABILITY

Many researchers emphasise the value of a thick description of qualitative data in providing readers with a database of evidence to judge the transferability of research data (Bryman, 2001; Rule, & John, 2011). In order to increase transferability, a detailed descriptive and reflective researcher's journal was kept in which the researcher reflected on the co-construction of the research findings that emerged. Data triangulation strategies were also implemented to verify the results from the different data sources in order to build a coherent justification of the themes (Creswell, 2014a; Robson, 2011). Strategies to improve the triangulation of the crystallised data included the use of various data sources (Rule, & John, 2011).

The findings were also referenced against the existing literature during a recursive literature study to assess value of the data interpretation and its application in relation to multiple theoretical perspectives (Robson, 2011). Sufficient data were gathered to judge their applicability in similar settings (Ebersöhn et al., 2012). Lastly, data verification by more senior researchers took place.

4.7.6 AUTHENTICITY

Seale (2002) views authentic data as fair and able to develop a more sophisticated understanding of a particular phenomenon by acknowledging and presenting different realities that may exist. The following authenticity principles were adhered to as suggested by Onwuegbuzie et al. (2010). I verified my data interpretation with the participants in order to be fair to them – this was done through email correspondence and telephonic verification so that their views could be reflected in my construction of the data findings. I maintained reflexivity by accounting for my personal views and acknowledging different interpretations of the data where they were identified.

It was also important to ensure that the participants were well informed before consenting to the research. This was done during an information session where the participants could ask questions about the research and intervention process. During this pre-intervention session, the participants were handed a written document explaining the research and intervention processes and the extent of their involvement. They were also told about the various stakeholders (surgical practice,



hospital, university, and therapist) in the research and how I related to them as researcher in terms of the construction of the research (ontological, educative, and involved authenticity). Tactical authenticity was established by collecting data from multiple sources at different times (first the participant diaries and individual interviews and then the focus group interview) (Onwuegbuzie et al., 2010).

4.8 ETHICAL CONSIDERATIONS

Mertens (2010) states that ethics is an integral part of research planning, no matter what paradigm is used. I therefore ensured that the study adhered to the requirements of ethical practice for psychotherapists and counsellors as stipulated by the Health Professions Council of South Africa (Allan, 2001).

4.8.1 INFORMED CONSENT AND VOLUNTARY PARTICIPATION

Written permission and informed consent was obtained from the participants and the participating orthopaedic practice (Williamson, Bellman, & Webster, 2012). Ethical approval was also obtained from the ethics committees of the Faculty of Education and the Faculty of Health Sciences of the University of Pretoria (Certificate of ethical approval can be viewed in the front pages of this thesis document).

In line with the ethical conduct in McMillan and Schumacher (2001), the participants were given the choice as to whether or not they still wanted to participate in the research after being informed of all the facts that might influence their decision (McMillan, & Schumacher, 2001).

As mentioned earlier, the participants were considered vulnerable as they required medical treatment and were less able to function in a self-determined manner. It was emphasised that despite their physical difficulties, they would be allowed to choose their level of participation in the intervention and research processes. An important feature of the informed consent was thus that the participants had the right not to participate in or to withdraw from the study if they wished no longer to participate (Silverman, 2013).



4.8.2 PRIVACY, ANONYMITY, AND CONFIDENTIALITY

The participants' privacy was respected at all times. They were assured that the raw data containing their identity details would be securely stored and that their anonymity and confidentiality would be guaranteed (Kaiser, 2009). The participants were made aware of the unique challenges of research conducted in a hospital environment as physical health care would remain an in-hospital priority for the medical staff. The private rooms made available by the hospital and the orthopaedic practice assisted in ensuring privacy and confidentiality. Permission was obtained from all participants for the use of audio recordings during the data collection, with none of the participants objecting to this.

Autonomy implies that the participants' self-determination was respected and that they could withdraw from the research process at any time should they wish to do so (Rule, & John, 2011).

Detailed information on the therapeutic intervention as well as medical information was also respected and treated in accordance with the requirements of confidentiality laid down by the Health Profession Council of South Africa (HPCSA).

4.8.3 **PROTECTION FROM HARM**

During the research process, harm was interpreted as including physical harm and emotional harm such as loss of self-esteem or emotional stress (Bryman, 2004; Rule, & John, 2011; Silverman, 2013). As discussed during the literature review, awareness of other potential psychological challenges such as trauma, adjustment challenges, and resulting depressive symptoms had to be monitored during the TKR process. This was done by applying the exclusion criteria for participants.

The context in which the research was conducted had some potentially negative psychological implications for the participants. I consequently guarded against placing the participants at risk. Awareness of the possible impact that therapy might have on participants going through a potentially traumatic experience obliged me to take reasonable measures to ensure that the participants were given proper care. These measures included debriefing after each session as well as my telephonic availability



for the participants and hospital staff. The participants were also informed that alternative psychological assistance was available on request.

The TKR participants were considered vulnerable due to the limits in their level of selfdetermination. Additional measures were therefore taken to ensure their confidentiality and to respect their opinion in choosing to continue or discontinue participation in the research and the related intervention (Rule, & John, 2011).

To further protect the participants from potential harm, the requirements of the Health Profession Council of South Africa (HPCSA) prohibited me from acting in a dual way for the participants. This meant that as researcher I was not allowed to act also as therapist for the participants during the research process (Allan, 2001).

4.8.4 ETHICS PROTOCOL DOCUMENTATION

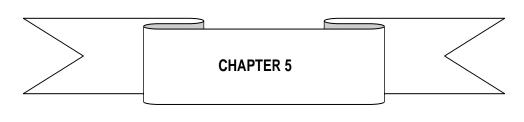
The following documents were used during the case study to ensure that the study adhered to the high standards of ethical protocol.

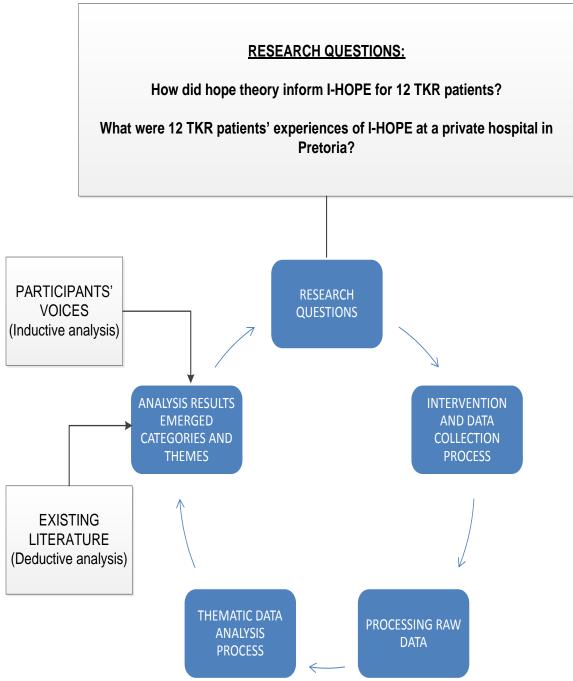
- i. The Research Information Document (RID) and Informed Consent Form for participants (Appendix D) informed the participants about the nature of the research and made provision for their written consent.
- ii. The Consent Letter to the orthopaedic surgery practice (Appendix E).
- iii. The Letter of Permission to conduct a research study at hospital X (Appendix F).

4.9 CONCLUSION

This chapter covered the research methodology employed to describe and explore I-HOPE for 12 TKR patients at a private hospital in Pretoria. It discussed the selected interpretive meta-theory in the qualitative research methodological paradigm as well as the specific strengths and limitations of this approach. The chapter also covered the case study research design and the selection strategies used as well as the data collection and data analysis strategies. A full description was given of the ethical considerations and quality criteria that applied during the research. In the following two chapters, the results of the study are discussed in terms of the associated themes and subthemes that emerged.









Chapter 5 Research Results and Literature Control

5.1 INTRODUCTION

In this chapter, I discuss the results in terms of the various themes and subthemes. The themes and subthemes as well as the inclusion and exclusion criteria are covered, with an explanation of how they were informed by the data and the literature. The results are substantiated with extracts from individual interviews, the focus group interview, participant diaries, and my researcher's journal. The full transcript of the research interviews were made available electronically as Appendix C.

Figure 5.1 and Table 5.1 below provide an overview of the research results and the frequency scores of the subthemes. The descriptive frequency analysis in Table 5.1 indicates the process of discovering patterns in the data and provides a more in-depth and contextual understanding of the participants' experiences. For example, it could be relevant to describe the experiences of the participants in terms of gender if it emerges that the varied experiences of I-HOPE are based on gender differences.



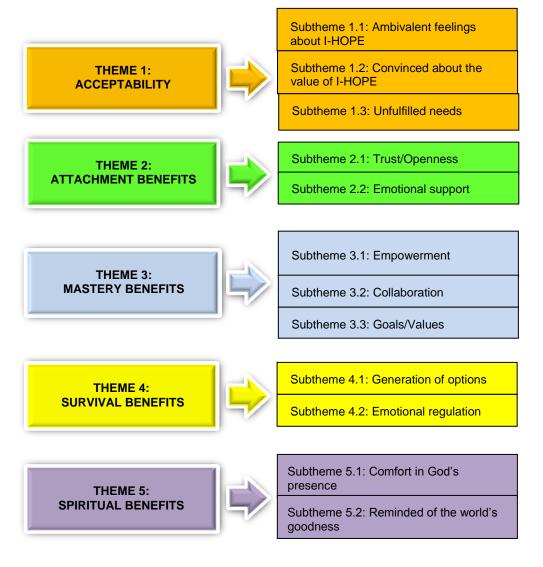


Figure 5.1: Results of the data analysis indicating the five main themes and their related subthemes (Themes 1-5)



Table 5.1: Frequency scores

	nt individual interview	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	(f)	Overall	Male	Female
(f) = source freque Gender distribut	ency / n = 12 ion: M = male / F = female	(F)	(M)	(F)	(F)	(M)	(F)	(F)	(M)	(F)	(M)	(M)	(M)		%	%	%
1. Acceptability	1.1: Ambivalent feelings about I-HOPE					x						Х		2	17	33	0
	1.2: Convinced about the value of I-HOPE	х	Х	х	Х		х	х	х	х	х		x	10	83	67	100
	1.3: Unfulfilled needs	Х		Х	Х	Х			Х	Х		Х	Х	8	67	33	33
2. Attachment	2.1: Trust/Openness	Х								Х				2	17	0	33
benefits	2.2: Emotional support	Х			X	X		X		X				5	42	17	67
3. Mastery benefits	3.1: Feeling empowered (inspired/educated via role model, group, new info)	x	x		x	x	x		x		x	x	x	9	75	100	50
	3.2: Collaboration (doctors, team of experts, healing partnerships)		X	X	X	X			X	X		X	x	8	67	83	50
	3.3: Focus on important goals/values				X					X	X			3	25	17	33
4. Survival benefits	4.1: Generation of options (self/others)											х	х	2	17	33	0
	4.2: Emotional regulation (self/others)	x			X				Х	х		х	х	6	50	50	50
5. Spiritual	5.1: Comfort in God's presence	X			X			X		X				4	33	0	67
benefits	5.2: Reminded of the world's goodness							X		x				2	17	0	33



As discussed in Chapter 4, the data analysis was primarily inductive in nature. This inductive process enabled me to immerse myself in the experiences of the participants and to follow a bottom-up approach. After immersing myself in their experiences and identifying possible themes, a deductive thinking process followed in that I endeavoured to make sense of these experiences by using a hope coding system similar to that of Scioli et al. (2015). Themes were coded based on how the emotional network of hope via the channels of mastery, attachment, survival, and spirituality manifested through the participants' experiences of I-HOPE. Themes were therefore identified if I-HOPE was linked to hope experiences in the TKR process; they were not identified if the participants simply referred to the TKR process in general or to other sources that they perceived to be supportive of hope. In this regard, four of the five themes were thematically described using the four channels of hope as described by Scioli et al. (2011), while one theme related specifically to the acceptability of I-HOPE.

5.2 THEME 1: ACCEPTABILITY OF I-HOPE

In the context of an intervention, the acceptability of treatment refers to the "degree to which stakeholders [find] the intervention to be fair, reasonable, appropriate, and consistent" with their expectations of the specific intervention (Huddleston, 2012, p. 2; Kazdin, 1980). Acceptability can also be defined as the quality or state of meeting someone's needs adequately (Acceptability, n.d.). Acceptability of an intervention influences the level of adherence to and engagement with an intervention (Drieschner et al., 2004), while engagement in or adherence to an intervention can be influenced by readiness for change by the patient, as described in the stages of change model (Erickson, Gerstle, & Fieldstein, 2005).

Although the stages of change model was not reported on in the literature review in Chapters 2 and 3, I came to realise during the process of defining the acceptability of I-HOPE that the model is an important variable to consider. This will be considered later in the discussion of the results in the recursive literature review.

Huddleston's (2012) description of acceptability of treatment standards guided me in identifying verbatim responses⁴ of instances where the participants indicated that they

⁴ The responses of the participants and the research diary entries are verbatim with only very light editing in order to preserve their authenticity.



found I-HOPE appropriate, suitable, and meeting their needs/expectations (or not). Responses of the participants that were used as indicators of acceptability included: *It* [I-HOPE] *was or was not … I think it was very … I realised it* [I-HOPE] … etc. These responses were considered indicators for this theme. The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this theme are summarised in Table 5.2 below:

Table 5.2: Theme 1 descriptions

WORKING DEFINITION	INCLUSION CRITERIA
The "degree to which stakeholders found the intervention to be fair, reasonable, appropriate, and consistent" with their needs and expectations of the specific intervention (Huddleston, 2012, p. 2; Kazdin, 1980).	Data indicating that the participants experienced I- HOPE as appropriate in meeting their needs and expectations (or not).
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data relating to experiences other than the acceptability of I-HOPE or needs that were met by other influences (or not).	It (I-HOPE) was or was not I think it was very I realised (I-HOPE) etc.

Although all the participants (n=12) in the study generally experienced I-HOPE as acceptable, they could, based on their level of engagement with I-HOPE, be divided into an ambivalent group (17%) and a convinced group (83%). The experiences of these groups will be discussed under the subthemes "ambivalent feelings towards I-HOPE" and "convinced about the value of I-HOPE".

5.2.1 SUBTHEME 1.1: AMBIVALENT FEELINGS TOWARDS I-HOPE

According to Mylvaganam (2009), ambivalence is similar to cognitive dissonance in that it describes conflicting feelings that are directly focused on the attitude of a person towards something. It includes a person's thoughts, beliefs, and feelings about an event. Ambivalence has important implications for therapeutic change and is often present during the contemplation stage of change (Norcross, Krebs, & Prochaska, 2011; Prochaska, Norcross, & Diclemente, 2013; Zimmerman, Olson, & Bosworth, 2000).

Indicators of ambivalence, based on Mylvaganam's (2009) description of ambivalence, are responses where the participants indicated indecisiveness about I-HOPE's value



or their need for it, weighed the intervention's cost and benefits, or displayed uncertainty about the personal need for the intervention. Responses of the participants, which were used as indicators of ambivalence, included: "*Can or cannot learn something*", "*It was good but …*", "*I am not sure*". The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.3 below:

Table 5.3: Subtheme 1.1 descriptions

WORKING DEFINITION	INCLUSION CRITERIA
Conflicting feelings directly focused on the attitude of a person towards something, including a person's thoughts, beliefs, and feelings about an event (Mylvaganam, 2009).	Data indicating that the participants had conflicting feelings about I-HOPE and uncertainty about their personal need for I-HOPE.
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating a particular positive or negative attitude towards I-HOPE.	Can or cannot learn something or not, It was good but I am not sure etc.

The ambivalent group consisted of 2/12 (17%) of the participants. Both these participants were men. Interestingly, if n=12 is considered, 6/12 of the participants were men, which means that if the frequency score for the men alone was calculated, it would indicate that 33% of the male participants were ambivalent towards I-HOPE, while 0% of the female participants experienced ambivalence.

P5 expressed ambivalent feelings in that he said that I-HOPE had potential value but only in instances where patients might experience emotional problems:

Ja, as daar 'n (emosionele) probleem gaan wees ... [C] (Interview P5, comment U405, p. 58). (Yes, if there was going to be an emotional problem ...)

He appeared to have been uncommitted and unconvinced about the need for I-HOPE:

- In my geval was daar nou nie ... [LIG SKOUERS IN ONVERSKILLIGE GEBAAR] [C] (Interview P5, comment U406, p. 58). (In my case there was no problem ...) [Shrugs his shoulders nonchalantly]
- Ek het nie probleme nie ... as ons gesels, ek kan daaruit leer of ek kan niks leer nie ... [C] (Interview P5, comment U408, p. 58). (I do not have a problem ... if we talk, I may learn something ... or I may learn nothing ...)



The response of P5 – if read together with my diary entry where I noted that in my interview with him his body language and tone was defensive – could be interpreted as indicating a possible fear of being stigmatised or labelled as someone with emotional problems/weakness if he requested and received psychological intervention:

P5 was almost defensive at times; it was as if it was important for him to make sure that I am aware that he does not need any psychological support. I got the impression that it might be embarrassing for him to be vulnerable in this way, and that seeing a psychologist might, in his view, not be socially acceptable. [C] (Researcher's journal, comment U1145, p. 179).

At the same time, he continued to say that he found the intervention interesting and that it helped him along his way:

Dit [die intervensie] was vir my interessant en dit het my deur die pad gehelp
 ... [C] (Interview P5, comment U401-403, p. 57). (It [the intervention] was interesting and it helped me along the way ...)

He added that it was a supportive influence, but that there were also other supportive influences apart from the I-HOPE such as support from his spiritual leader:

Maar daar was so baie ondersteuning, dit het van orals gekom, dit het van die predikant gekom ... [C] (Interview P5, comment U401-403, p. 57). (But there was a lot of support, it came from everywhere, it came from the preacher ...)

P11 expressed ambivalent feelings in that although, retrospectively, he did not regret participating in I-HOPE, he was uncertain if he personally needed the intervention:

I am not so sure ... I feel that it is afterwards, now that it is afterwards, I doubt that it was needed at all ... I am glad I signed onto the program, I would rather not have not done it, you know what I mean ... [C] (Interview P11, comment U740/743, p. 108-109).

Ambivalence towards I-HOPE was thus present in the two participants. One, retrospectively, was uncertain about his need for the intervention, while the other believed I-HOPE was necessary only when there were emotional problems.



5.2.2 SUBTHEME 1.2: CONVINCED ABOUT THE VALUE OF I-HOPE

In line with Kazdin's (1980) definition of the acceptability of treatment during psychological intervention, being convinced implies an internal congruency between people's expectations regarding the treatment and their perception of its appropriateness in meeting their needs. Being convinced of an intervention's value is important in achieving therapeutic change. The action stage of the stages of change model is characterised by participants who are convinced and ready to take action towards achieving change (Norcross, Krebs, & Prochaska, 2011). Being convinced of an intervention's value can signify a transition into the action stage of the stages of change model (Norcross et al., 2011; Prochaska, Norcross, & Diclemente, 2013; Zimmerman, Olson, & Bosworth, 2000). Responses of the participants that were used as indicators of being convinced included: *"I realised the worth"*, *"has its place"*, *"valuable"*, *"refreshing"*, *"it was a highlight*, and *"needed*. The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.4 below:

Table 5.4:	Subtheme	1.2	descriptions
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WORKING DEFINITION	INCLUSION CRITERIA
Certain about the value of the intervention and finding it to be consistent with expectations and appropriate to needs (Huddleston, 2012; Kazdin, 1980).	Data indicating that the participants were certain or convinced about the benefits that the intervention held for them.
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Participant statements that indicated they were not convinced about the value of I-HOPE.	Positive, more than expected, realised worth, has its place, valuable, refreshing, it was a highlight, needed etc.

The convinced group represented the majority 10/12 (83%) of the participants, and, while 3/12 (25%) of the participants in this group expressed their awareness of the need for the intervention from the start, 7/12 (58%) seemed to have become convinced about the acceptability of I-HOPE during the course of the intervention.

P4 reported that initially she did not expect much from the intervention, yet came to experience it as very positive:



Die proses was vir my baie meer positief as wat ek dit verwag het ... [C] (Interview P4, comment U207, p. 33). (The process was far more positive than I expected ...)

She later added that she regarded I-HOPE as essential and that it was a very good idea:

Ek dink dis baie noodsaaklik ... ek dink dit is 'n baie goeie ding ... [C] (Interview P4, comment U287, p. 40). (*I think it is essential ... I think that it is a very good idea ...*)

P12 said that he realised, during the first session of the intervention, that I-HOPE was a more important component in his TKR treatment than he initially thought it would be:

Ek het besef, jo, hierdie ding [die intervensie] ... daar is 'n plek vir dit ... [C] (Interview P12, comment U807, p. 119). (I realised that this thing [I-HOPE)] ... that there is a place for it ...)

This participant referred specifically to the first session of I-HOPE as the turning point for him in realising that I-HOPE was valuable to him:

Daai opname [sessie een] ... die swaai in my kop het daar baie erg gebeur ... ek het dit nie toe besef nie ... ek het na die tyd gedink, hoekom sal ek nou sê hierdie [intervensie] is 'n goeie ding ... toe het dit vir my uitgekom ... [C] (Interview P12, comment U809, p. 119). (That recording [session one] ... the shift in my mind happened there ... in all earnestness ... I did not realise it then ... afterwards, when I reflected on why this intervention was a good thing, it stood out for me ...)

P8, one of the three participants who had not yet retired, described I-HOPE as a fresh experience for him:

 I found the intervention to be a very refreshing approach to the TKR ... [C] (Patient diary P8, comment U605, p. 90).

After returning to work, P8 shared his experience of I-HOPE with one of his colleagues, who also happened to be a psychologist. He conveyed her reaction when hearing about I-HOPE as follows:

She [P8's therapist colleague] was floored by this [hearing about I-HOPE]; she was taken aback, she had never heard of it, like me ... [C] (Interview P8, comment U573, p. 84).



He came to the following conclusion about I-HOPE:

> I think it's a brilliant idea ... [C] (Interview P8, comment U573, p. 84).

Two of the participants, one man and one woman, described the intervention as meaningful:

Ek dink dit was sinvol gewees ... [C] (Interview P10, comment U708, p. 102;
 Interview P7, comment U480, p. 74). (*I think it was meaningful ...*)

P1 indicated that she believed I-HOPE gave her much-needed support. It was, however, difficult for her to describe exactly how the intervention helped her. The following extract suggests that the intervention assisted her with more than just the TKR process:

Dit [die intervensie] het vir my baie meer gehelp as wat ek ooit kan beskryf ...
 [C] (Interview P1, comment U21, p. 5). (The intervention helped me much more than I could ever describe ...)

P1 experienced problems at work, which she believed were related to her immobility and absence from work as a result of the TKR surgery. The problems seem to have created some tension for her, and she thought that I-HOPE assisted her in coping with the tension:

My grootste probleem is my [WYS NA DIE INSKRYWING IN HAAR DAGBOEK] ... ja, maar as ek nie die operasie gehad het nie, het ek nie nou die probleem [by die werk] gehad nie ... so die twee [TKR en probleme by werk] loop maar hand aan hand saam, en ek dink regtig dit was 'n bestiering dat julle (I-HOPE) daar was ... [C] (Interview P1, comment U11, p. 2). (My biggest problem was [POINTS TO AN ENTRY IN HER DIARY) ... yes, but if I had not had this operation, I would not have had the problem [at work] ... so the two [TKR and problems at work] go hand in hand ... I really think it was an act of providence that you (I-HOPE) were there ...).

P1 wrote extensively in her diary about other life challenges that became important to her during the TKR process. It seems that her participant journal provided her with the opportunity to reflect on the death of her mother, her work difficulties, and her financial problems:

Ek beperk my drome gereeld met my omstandighede ... wat pla my? ... die skool [werksplek] ... gaan ek ander werk kry met my gesondheid? [C] (Participant diary P1, comment U101, p. 17). (I often restrict my dreams



because of my circumstances ... what is bothering me? ... the school [workplace] ... will I get another job with my health?)

P1's mother had died the previous year, and she was still trying to come to terms with this loss. The healing process was to some extent facilitated through being able to express her feelings in her participant diary:

Ek weet dis my ma se drome ... net spyt ek het nie belang gestel nie ... [C] (Participant diary P1, comment U87, p. 16). (I know they are my mother's dreams ... I just regret that I was not interested ...)

The following extract from my researcher's journal after interviewing P1 and reading her diary gives some insight into how I-HOPE supported her with more than just the TKR surgery:

She seems to have benefited from the intervention in various ways. It seems that the intervention calmed her, helped her to reflect on life as well as discover who she would like to be. It seems to me that the intervention also allowed the opportunity for her to deal with or at least talk about various underlying psychological challenges, such as the death of her mom, her challenging work situation and financial needs. [C] (Researcher's diary, comment U1145, p. 178).

P9 ascribed the acceptability of I-HOPE to various factors. She cited the value the therapist added to her treatment as one reason why she appreciated I-HOPE:

Omdat sy [die terapeut] vir my waarde toegevoeg het, sou ek graag dit wou gehad het ... (Interview P9, comment U676, p. 97). (Because she [the therapist] added value, I really would have wanted it [I-HOPE] ...)

She added that the concept of I-HOPE was acceptable to her and that she was very glad that she had participated in the intervention:

Maar verder, die konsep en alles ... ek was baie bly [dat ek deelgeneem het] ... [C] (Interview P9, comment U676, p. 97). (*Furthermore, the concept and everything ... I was very glad that I participated ...*)

P9 also described the intervention as a fresh experience for her:

'n Lekker vars iets wat met my gebeur het toe julle my kom sien het ... [C]
 (Interview P9, comment U638, p. 93). (A nice fresh thing that happened to me when you [the therapist] came to see me ...)



She enjoyed being part of I-HOPE and recommended it not only to TKR patients, but to any patient who had to undergo a high-risk medical procedure:

So dit was ... nee, 'n baie aangename ervaring ... ek sal dit voorstel vir enige iemand wat 'n hoë risiko prosedure moet kry ... [C] (Interview P9, comment U644, p. 93). (It was a very enjoyable experience ... I will recommend it to anyone who has to undergo a high-risk procedure ...)

She reported that she thought the intervention had contributed to her psychological coping:

Dit het baie bygedra tot my herstel, jy weet psigies ... [C] (Interview P9, comment U656, p. 95). (It made a great contribution to my recovery, you know, psychologically speaking ...)

She said that I-HOPE addressed another side of being human:

Dit was vir my meer as wat net die medici vir jou kan bied ... daar was vir my 'n ander faset van jou menswees wat aangespreek is ... die feit dat daar op 'n ander vlak, dat jy op 'n ander vlak bedien was as net die fisiese vlak ... [C] (Interview P9, comment U672/679, p. 96/97). (It was more than doctors alone could offer you ... another facet of being human was addressed... the fact that you were served on a level other than the physical level ...)

P8 made sense of the value of I-HOPE by viewing it from a professional person's point of view:

I think your intervention is wise ... so that you people [psychologists] can understand where the patient is ... even if the patients do not feel it is necessary, I think from your point of view it is necessary... [C] (Interview P8, comment U570/571, p. 84).

He also referred to the first session of the intervention as the pro-active first step in providing emotional protection, allowing the therapist to assess and monitor the emotional health of the participants, thereby indicating that he understood the preventative value of I-HOPE:

If you had that pro-active intervention before, you will know that if within the next week you see any difference, you will know it ... I think that's important ...
 [C] (Interview P8, comment U595, p. 87).



5.2.3 SUBTHEME 1.3: UNFULFILLED NEEDS

Inadequate, inconsistent, or inappropriate fulfilment of needs is associated with a low degree of acceptability that may influence the quality of an intervention (Huddleston, 2012). When one considers that part of Kazdin's (1980) definition of acceptability focuses on the appropriateness of an intervention in meeting the needs of its recipients, then it is also important to consider those aspects of I-HOPE that the participants indicated as lacking or not suitable in addressing their needs.

The participants' responses that typically indicated the need for refinement included: *"There was no ...", "it would be nice to ...", "maybe ...", "a great need for ...", and "I feel that there needs to be ..."* The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.5 below:

Table 5.5: Subtheme 1.3 descriptions

WORKING DEFINITION	INCLUSION CRITERIA
The inadequate, inconsistent, or inappropriate fulfilment of needs, associated with a low degree of acceptability (Huddleston, 2012).	Data indicating ways in which the participants' needs were not met by I-HOPE that can lead to its refinement.
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating needs not met by interventions other than I-HOPE.	There was no it would be nice to maybe I feel that there needs to etc.

Eight out of the 12 (67%) participants provided feedback on aspects of I-HOPE that could be improved/refined, based on their unfulfilled needs. These unfulfilled needs were expressed in terms of five areas: Firstly, 2/12 (17%) of the participants said that I-HOPE was less of a priority when they experienced physical challenges such as managing pain and fatigue. Secondly, 3/12 (25%) of the participants expressed a need for information (education). This need had two components, namely providing them with information on how to measure/monitor their physical progress after surgery, and on how to transition from hospital to home. In the latter process, the need to involve core family members was emphasised. Thirdly, 2/12 (17%) of the participants said they would like fewer interruptions during I-HOPE from medical staff and visitors. Fourthly, time problems surrounding the duration of I-HOPE were mentioned by 5/12 (42%) of the participants. This included increasing the length of the



sessions 3/12 (25%) and the number of sessions 2/12 (17%). Two out of the 12 (17%) participants also expressed the need for a session after discharge from hospital. Lastly, 1/12 (8%) expressed the need for physical contact during I-HOPE. The participants' experiences in these five areas will be illustrated with verbatim extracts in the following section.

Two (17%) of the participants (P6 and P12) reported that their need for psychological care became less important when their physical needs were their primary concern. P6 said the following:

Ja, kyk in daai opsig is ek dalk anders as ander mense ... as ek swaarkry en siek is wil ek nie mee gepeuter word nie ... so die tydsberekening was nie vir my heeltemal reg gewees nie ... ek weet dit is nou onrealisties, maar mense later sien ... na die operasie ... [C] (Interview P6, comment U461/462, p. 71). (Yes, in that regard I may be different from other people ... if I am struggling and feel ill, I do not want to be bothered ... so the timing of the intervention was not right for me ... I know it is unrealistic, but rather see people later... after the operation ...)

P12 confirmed this view:

My opinie is nogal dit, in die sin van ek wil net hierdie pyn weg hê ... en jy weet toe dit weg is wil ek net slaap, ek soek energie, my energie vlakke is weg ... en dan is my interaksie en my behoefte aan mense is niks ... [C] (Interview P12, comment U824, p. 120). (My view is this, in a sense I just wanted to get rid of the pain ... and you know when it was gone, I just wanted to sleep ... I needed energy, my energy levels were shot ... and then my need for interaction with people was non-existent ...)

Physical symptoms played a key role after the surgery. In the following two extracts, P3 states that after the surgery in hospital she just wanted to sleep, while P11 talks about the problems he experienced in managing the pain:

- *Ek het net geslaap* ... [C] (Interview P3, comment U204, p. 32). (*I just slept* ...)
- You know, a lot of it was focused on pain ... it was trying to get your head around that much pain you are in and what to do about it ... so that first week in hospital was really just, uh, trying to manage that ... [C] (Interview P11, comment U756, p. 109)



A need for information (education) was expressed by 3/12 (25%) of the participants. They wanted better guidance in terms of the challenges they experienced during the TKR process. Physical and emotional problems often merged during the TKR process, and the participants expected the therapist to be knowledgeable and to provide guidance on all aspects of the process. P4 expressed a need for mental preparation before making the transition from hospital to home care:

Daai oorskakeling van die hospitaal na die woning ... dat 'n mens vooraf of terwyl die pasiënt in die hospitaal is hulle attent maak daarop dat daar ewe skielik 'n slaggat is as 'n mens by die huis kom ... want ek dink jou gesin weet nie, en jy is nog nie lekker in staat om dit te hanteer nie ... so dit is miskien 'n goeie ding as 'n mens daar 'n bietjie meer paraat kan wees ... [C] (Interview P4, comment U276, p. 39/40). (The transfer from hospital to the home ... the person should be made aware of this beforehand, while the patient is still in hospital ... make them aware that they will all of a sudden have problems when they get home ... because I think your family do not know, and you are not yet able to handle it ... so maybe it is a good thing if one can be a bit more prepared ...)

P4 also said that the participants' families should be present in preparing for the transition:

So ek dink om pasiënte meer voor te berei om daardie oorgang meer foutloos te maak, dat 'n mens net 'n ander verwagting het ... dit en dan sou ek regtig sê dit sou goed wees as die hele gesin kan by wees of dalk net 'n gedeelte van die gesin as dit nie anders kan nie ... [C] (Interview P4, comment U282, p. 40). (So I think patients should be better prepared to make the transition from the hospital to the home smoother and to have realistic expectations ... it would be good if the whole family could be present or at least part of the family, if possible ...)

P11 said he wanted to be able to rate his progress based on predetermined expectations or progress milestones:

I also think it is very important and, I mean, if I had one criticism of this [I-HOPE] process, it is there is no way to rate where you are during the process ... so sitting here now, I don't know whether I am doing well or not doing well, in comparison with ... and I don't know if there is a way to set something ... so I would also say it is very important ... I would like to know by week three, you



should be experiencing this ... so I would like to know where I am ... so maybe it's just me individually, but I would like to know, target wise, where I should be ... [C] (Interview P11, comment U774/775/778, p. 114).

Yes, and you need to know, to rate yourself, because if I am not doing enough, exercising or whatever, I would like to know if I need to step it up, and if I'm behind because I am not doing enough exercising ... [C] (Interview P11, comment U781, p. 115).

A third issue that was highlighted were the interruptions during I-HOPE. According to 2/12 (17%) of the participants, the interruptions from medical staff and visitors played a significant negative role in the delivery of I-HOPE. These two participants shared the following experiences:

Elke keer as sy [the therapist] dit wou doen [I-HOPE] was daar iemand anders besig ... en dan was sy maar so vinnig in en uit ... [C] (Interview P5, comment U201, p. 30). (Every time she [the therapist] wanted to do it [I-HOPE], someone else was busy with me ... then she was quickly in and out again ...)

He (P5) described the hospital as a very busy place and said that this was a problem for in-hospital therapy:

Laat ek jou sê as daar nie so 'n bedrywigheid was nie, want partykeer is dit dat daar iemand besig is met jou ... dan het sy [die terapeut] twee keer nou al gekom en dan is daar weer iets wat hulle doen ... dit is 'n probleem ... [C] (Interview P5, comment U206, p. 32). (Let me tell you, if it wasn't so busy, because sometimes someone was busy with you ... then she [the therapist] would already have come twice, and then there is something else they [the hospital staff] want to do ... it is a problem ...)

Despite not having the sessions during scheduled visiting hours, the therapist seems to have had to make way visitors or medical staff:

E [die terapeut] het probeer om altyd by my uit te kom, maar dit het nie so gewerk nie, want die meeste van die tye sien ek sy was op pad na my toe en dan groet sy my net so in die verte dan moet sy nou gaan, dan is daar nou mense by my [besoekers] ... dan wys sy sy sal later kom en dan as sy later kom is die volgende mense daar, of die suster of die dokter is besig ... dit was 'n groot probleem vir haar om by my uit te kom ... [C] (Interview P5, comment U385/387, p. 54/55). (The therapist always tried to see me, but it did not work out that way because I see she is on her way to me and then she greets from



a distance as she has to leave again ... as I had people with me [visitors] ... then there is someone with me ... then she will come back later and then people are with me again, or the sister or doctor is busy ... it was a big problem for her to get to me ...)

P12, too, indicated that the interruptions during sessions were problematic and influenced the continuity of the intervention:

Daar was nie kontinuïteit nie, en daar was onderbreking, en dan is die suster daar en so, en so, en so ... dit is 'n ding die onderbrekings ... [C] (Interview P12, comment U364, p. 126). (There was no continuity, and there were interruptions, and the sister was there, and so on, and so on ... these disruptions were quite a thing ...)

Five out of the 12 (42%) of the participants thought the sessions were too short. They wanted either an increase in the number of sessions (17%), or an increase in the time spent during the I-HOPE sessions (25%), or both 5/12 (42%). Especially in cases where the hospital stay was extended due to complications, four sessions were considered inadequate.

P1 was one of the participants who wanted more sessions with the therapist as she stayed slightly longer in hospital than normal due to excessive post-surgical pain:

So as iemand sou lank bly [in die hospitaal] om dalk 'n bietjie meer aandag te gee [sou dit goed wees] ... [C] (Interview P1, comment U62, p. 13). (So if someone stays in the hospital longer, giving a bit more attention [it would be a good thing] ...)

P12, too, said that he would have preferred more sessions:

Ek is net jammer sy was net drie keer daar [na die operasie], ek sou graag meer met haar wou kuier, maar dit het nou net so gebeur ... [C] (Interview P12, comment U808, p. 119). (I am sorry she was there only three times [after the surgery]. I would have wanted to see her more often, but it did not work out that way ...)

Both P3 and P8 expressed the need to have more time to talk to the therapist:



- Ons twee [deelnemer en terapeut] kon nie regtig kans kry om baie te praat nie
 ... [C] (Interview P3, comment U196, p. 30). (*The two of us* [participant and therapist] did not really get the chance to talk much ...)
- No, no. You know, I think maybe the time spent with E [the therapist] was too short ... [C] (Interview P8, comment U542/546, p. 81).

P12 echoed these sentiments and added that he believed that by increasing the interaction time with the therapist, he would perhaps have opened up more to her and shared more with her:

Ja, vir my ... het ons meer tyd saam gehad, of interaksie saam gehad, sou daar meer en ander goed gesê gewees het, ensovoorts en sou dit [ander sessie] dan anders of 'n groter impak gehad het ... [C] (Interview P12, comment U865, p. 126). (If we had more time together, more and different things could have been said, and it would have made a greater impact ...)

Three out of the 12 (25%) participants expressed a need for I-HOPE sessions after discharge from hospital. P8 seemed to have had a very difficult time after discharge and expressed the need for continued therapeutic support:

- For the first three weeks [after discharge], I was very weak and felt insecure ... I fell down our stairs twice, fortunately with no consequences other than that I was shaken up ... [C] (Participant diary P8, comment U616, p. 90).
- I think it [the intervention] is brilliant and maybe should be more involved after the operation ... [C] (Interview P8, comment U576, p. 85).

He (P8) suggested the following:

I think if you can get to your patient within the first 10 days of the operation [after the TKR surgery] ... I think another follow-up three weeks later, and if you can't have it physically, have it over the phone ... can I phone you tonight at five o'clock or this afternoon? I think then after about two months, when the patient goes back to the doctor, I think this is a very good time as well ... [C] (Interview P8, comment U596/597, p. 87).

P12 similarly expressed the need for a session after discharge from hospital:

Ja, ek dink selfs miskien na ontslag, is ook nie uit plek uit nie, weet jy net sodat jy bietjie ... hoor hier, dinge is nou all right ... [C] (Interview P12,



comment U888, p. 132). (Yes, I think, even perhaps after discharge, an extra session will be acceptable ... just to hear if you are doing well ...)

For P9, an I-HOPE session after discharge from hospital to the step-down clinic would have given her the opportunity to thank the therapist and say goodbye. She thought the intervention ended too abruptly:

- Persoonlik sou ek haar net nog 'n keer wou gesien het en dankie gesê het en gegroet het ... want dit het mooi geloop en toe op 'n punt toe hou alles op ...
 [C] (Interview P9, comment U675, p. 96). (Personally, I would have liked to see her once more to thank her and say goodbye ... because all had gone well up to a point, and then it stopped ...)
- Iemand was daar vir my ... ek het nie alleen gevoel nie, en toe sy nie meer kom nie, het ek haar gemis [met skuif na ander hospitaal vir step down] ... ek het haar gesoek ... [C] (Interview P9, comment U648/649, p. 94). (Someone was there for me ... I did not feel alone ... and when she stopped coming, I missed her [with the move to another hospital for step down] ... I was looking for her ...)

The following extract from my researcher's diary highlights the need for more I-HOPE sessions:

After seeing her (P9), I realised that there might be a very specific need to continue supporting patients, especially those developing further complications. It might be naïve to think that a short four-session intervention will sufficiently meet all the patients' needs. [C] (Researcher's diary, comment U1147, p. 181).

P12 expressed his need for physical contact during I-HOPE. He indicated this need while also acknowledging the social issues in his Afrikaner culture and also the potential ethical issues involved:

Ek uh, ek uh, as iemand soos E [die terapeut] ... as sy my kon vashou en jy weet daardie TLC gee ... ast'ware fisieke kontak gee ... sou dit nogal gewerk het ... min terapeute operate op daardie vlak ... [C] (Interview P12, comment U825, p. 120). (I uh, I uh, if someone like E [the therapist] ... if she could hold me and give me, you know, TLC ... real physical contact ... it would have worked ... few therapists operate on that level ...)



Ek glo aan fisiese kontak, ek sê dis 'n komponent van die menswees en deel van die simptome, en nie net die simptome nie, maar ook die sintuie ... dis deel van sintuie en die meeste mense het daaraan 'n moerse behoefte, maar jy weet ons Afrikaners ... ons is skaam mense, ons wys nie, so ons vat nie, maar ek doen dit vir my ... uh, daar is 'n plek vir dit en 'n mens moet dit nou natuurlik mooi hanteer, maar daar is 'n plek vir dit ... [C] (Interview P12, comment U825, p. 120). (I believe in physical contact, I believe it is part of being human and part of the symptoms, and not only the symptoms, but also the senses ... it is part of the senses and most people have a great need for it ... but you know we Afrikaners ... we are shy people, we do not show, we do not touch, but I do it for me ... uh, there is a place for it ...)

This section described the acceptability of I-HOPE to the participants. In the following section, I will relate the findings obtained from the participants to the existing literature and identify the specific contributions of this research.

5.3 LITERATURE CONTROL: THEME 1 – ACCEPTABILITY

This section covers the findings in Theme 1. I will comment on aspects of the data that confirm the findings in the existing literature and point out possible contradictions in the findings of the present study. I will also share new insights obtained from the data. This process will be repeated directly after the description of each theme discussed in this chapter.

5.3.1 CONFIRMATIONS AND CONTRADICTIONS OF EXISTING KNOWLEDGE IN TERMS OF THE ACCEPTABILITY OF I-HOPE

As stated in Chapter 1, I-HOPE is the first very brief hope-based intervention for TKR patients done from a psychological perspective, which makes comparisons with other studies difficult. I will therefore revisit the literature reported on in Chapters 2 and 3 – which dealt with hope theory and hope-based interventions – and I will also broaden my focus by considering literature not reviewed in these two chapters. Psychological intervention research, as well as the literature on hope-based intervention, highlights the importance of client variables such as the level of acceptability of an intervention



(Clarkin, & Levy, 2004; Howell et al., 2014; Marques et al., 2011). Acceptability of an intervention is considered a determining factor in the success of any therapeutic intervention as a negative perception may have a detrimental effect on the intervention's outcome (Drieschner et al., 2004).

When comparing I-HOPE with other hope-based interventions delivered in a medical context, studies such as those conducted by Herth (2001), Duggleby et al. (2007), and Rustoen et al. (2011) give some indication of how these researchers reported on the engagement (completion rate) and the level of helpfulness (usefulness) exhibited by their participants. Herth (2001), for example, asked the participants to rate the helpfulness of the "Hope Intervention Program (HIP)" on a 5-point Likert scale. Ninetyeight percent of the participants in this study rated the intervention as extremely helpful, 2% rated it as just helpful, and none of the participants rated it as unhelpful. Based on these scores, Herth concluded that the participants found the intervention helpful. Duggleby et al.'s (2007) "Living with Hope Program" evaluated the acceptability of their intervention based on low dropout rates and high levels of engagement from the participants and concluded that their intervention was acceptable. Rustøen et al. (2011) concluded that their intervention was useful to its participants based on a 95% usefulness score on a 4-point Likert rating scale. Four percent of the participants in Rustøen et al.'s (2011) study indicated ambivalent feelings towards the usefulness of the intervention.

The acceptability of I-HOPE to the participants was not judged based on any scale or formal questionnaire. Rather, judgement of acceptability was based on the participants' experiences, which were analysed thematically and grouped into themes. The frequency scores for the themes and subthemes contributed to our understanding of the data. On this basis, I-HOPE was experienced as acceptable by 10/12 (83%) of the participants. Two out of the 12 (17%) had ambivalent feelings about I-HOPE, but they both still accepted the intervention. It can therefore be assumed that I-HOPE supported the participants' needs at an acceptable level. None of the participants who met the selection criteria dropped out of the I-HOPE intervention.

As mentioned, engagement in an intervention can be influenced by a person's acceptance of the intervention (Huddleston, 2012). According to Drieschner et al. (2004), the level of engagement of a person depends on adherence to the



requirements of the intervention as well as his or her readiness for change. The level of engagement in and acceptability of the intervention are therefore mutually dependent. In psychological interventions, levels of engagement are explained by Prochaska et al.'s (2013) stages of change model. This model is based on five levels of change, namely the pre-contemplation, contemplation, preparation, action, and maintenance stages briefly referred to earlier in this chapter.

The pre-contemplation stage is characterised by no intent on the part of an individual to change in the foreseeable future, and the individual may also not be aware of any challenges he or she may be experiencing or change that is needed. In the contemplation stage, individuals may be aware of challenges and may seriously consider reacting to the challenges, but they are not committed or convinced to do so yet as they are still ambivalent towards change. In the preparation stage, there is some intention to make changes, and small behavioural changes may be reported. In the action stage, individuals will modify their behaviour and become engaged in the intervention. Lastly, in the maintenance stage, the aim is to prevent a relapse (Prochaska et al., 2013).

Scioli et al. (2015) investigated the stages of change in a study on the relationship between hope and health-related nutrition and exercise. In suggesting the wider use of the stages of change model, the authors indicated that survival hope was associated more with moving past contemplation, while mastery hope was associated more with a high sense of empowerment, which can be linked to the action and maintenance stages of change.

The stages of change as described by Prochaska et al. (2013) may have played a role in the acceptability judgements of the participants towards I-HOPE in the present study. This, in turn, may have influenced their level of engagement during the intervention and also possibly their judgement of I-HOPE as acceptable or not. The two participants with ambivalent feelings towards I-HOPE may have been in the contemplation stage of change, which means they may still have been weighing the benefits against the costs of taking part in the intervention (Zimmerman et al., 2000). Similarly, if one considers Scioli et al.'s (2015) research referred to earlier in this section, the two participants who were ambivalent to I-HOPE may have been engaging with survival hope.



The ten participants who were convinced about the value of I-HOPE could similarly be described, in terms of the stages of change model, as being in the action phase of change and, according to Scioli et al. (2015), in the mastery hope stage.

Although the present study highlights the importance of understanding the participants' stages of change, it was not part of the design of the study to research and account for stages of change during I-HOPE. The interpretation of the participants' level of engagement based on the stages of change model is thus purely speculative, and further research is required before any conclusions can be drawn in this regard.

According to Mylvaganam (2009), ambivalence in individuals towards an intervention is influenced by three factors: the individual's beliefs, thoughts, and feelings about the intervention. Mylvaganam (2009) contends that attitude towards an intervention may result in ambivalent feelings when there is conflict between a person's beliefs, thoughts, and feelings about the intervention. This may, in turn, influence the outcome of the intervention (Mylvaganam, 2009). Ambivalence in the present study suggests that some participants' feelings, thoughts, and beliefs may have been in conflict about the intervention and that this influenced their attitude towards I-HOPE. Again, this could be purely speculative, and a conclusion on the exact reason for the ambivalence towards I-HOPE can be reached only if the matter is explored further with those participants who expressed ambivalence.

It is, however, interesting to note that while two male participants in this study expressed ambivalent feelings towards I-HOPE, none of the female participants experienced such feelings. The literature suggests that men are often more hesitant to seek psychological help as the attendant social stimatisation in the male role identity may prevent some men from seeking such help (Eisenberg, Downs, Golberstein, & Zivin, 2009; Komiya, Good, & Sherrod, 2000). Corrigan and Watson (2002) found that social stigma can often be associated with people's attitudes towards receiving psychological assistance due to its association with mental illness. The possibility that fear of stigmatisation played a role in the ambivalence of the male participants in this study can also not be excluded.



Various other predictors can influence people's seeking psychological assistance such as age, religion, and economic status (Eisenberg et al., 2009; Komiya, Good, & Sherrod, 2000), which could perhaps also explain the ambivalent feelings of the two male participants towards I-HOPE. Further research into the motives of these participants will have to be done if definitive answers on this matter are desired.

The top three concerns of knee and hip arthroplasty patients in a Canadian study were complications arising from the surgery, the time frame before they walked properly, and how their pain could be reduced (Rudan, Harrison, & Grant, 2009). The I-HOPE participants' concerns were explored in terms of the intervention and did not focus on medical concerns per se, yet these participants nonetheless to some extent confirmed Rudan et al.'s (2009) research in two ways. Firstly, in expressing the need to be able to monitor their recovery process (time frame to walk) and, secondly, in expressing the concern that their physical needs (pain and fatigue) might at times overshadow their need for a psychological intervention. Other requests expressed in the present study were longer and more sessions, limiting disruptions, and psychoeducational preparation to meet the challenges of transitioning from hospital to home.

Although the efficacy of very brief interventions has been reported on by Berg et al. (2008) as well as Feldman and Dreher (2012), the findings of this study suggest that the current format of four sessions, which in terms of Talley's (1992) definition is a very brief intervention, did not fully meet the needs of the I-HOPE participants, and the findings suggest that I-HOPE could be improved by adding more sessions. Rustøen et al. (2011) also reported that 27% of the participants in their eight-week hope-based intervention were in favour of an extension. Some of the I-HOPE participants expressed a need for extra sessions after discharge from hospital, and a need for follow-up or "booster sessions" was also expressed by the participants in Rustøen et al.'s (2011, p. 335) study.

The present study therefore to some extent contradicts Berg et al.'s (2008) and Feldman, & Dreher's (2012) findings that very brief interventions are effective in increasing hope. These interventions, however, did not take place in a hospital context or in the context of physical health care and were qualitatively explored using a unidimensional interpretation of hope.



According to Pellino et al. (2005), it is important to understand the need for the correct timing of non-pharmacologic strategies after orthopaedic surgery. Symptom management and fatigue need to be taken into account when providing support to patients in a hospital setting (Farran et al., 1995; Herth, 2005; Herth, 1990b). Also, post-operative physical and emotional fatigue is closely associated with TKR procedures (Salmon, & Hall, 1997; Salmon, & Hall, 2001). Some of the participants in the present study reported that their physical needs overshadowed their need for psychological support. The timing of I-HOPE was thus experienced by some of the participants as inconvenient due to pain and depleted energy levels.

The need to educate the participants as well as their families in order to improve their preparation for the transition from the hospital to the home environment emerged in this study. Existing research indicates the value of providing information on medical procedures and psychoeducation and on the benefits of managing patient anxiety and improving self-efficacy and how this can positively influence patient recovery after surgery (Lucas, 2007; McDonald, Hetrick, & Green, 2004). Fielden, Scott, and Horne (2003) concluded from their study that it is the task of a multiprofessional team to improve care coordination during the discharge of arthroplasty patients and suggested that a nurse as mentor-coach should educate patients in this regard. This function can also be fulfilled by a therapist with knowledge of these health considerations.

Bull (1992) contends that for older adults (55+) the two-week period after discharge from hospital is crucial in re-establishing routines and acquiring mastery. The findings from the present study suggest that the transition from the hospital to home was difficult for at least one I-HOPE participant.

Negotiating the professional relationship between client and psychologist is an important ethical issue in any therapist-client relationship (Allan, 2008). Departing from the norm by seeing clients/patients in an in-hospital setting poses specific threats to the professional relationship, and the risks are high of boundary transgressions in terms of place and space. Although a boundary is often physical, in psychology it is defined as "an imaginary line between behaviour that is generally appropriate when a therapist acts in a professional capacity, and behaviour that is not ... norms and law, positive morality and professional ethics primarily define these boundaries" (Allan, 2001, p. 7). It is the duty of the therapist to ensure that boundaries are properly



defined. Evidence from the present study points to the need to ensure that I-HOPE is properly negotiated in terms of place and space during the in-hospital intervention to obviate such ethical concerns. Specific threats to the professional relationship between the I-HOPE therapist and the participants were interruptions by others, a need expressed for physical contact, and the departure from consulting in a therapist's rooms to consulting a vulnerable client in a hospital bed.

A significant problem during the intervention were the continuous interruptions by medical staff as well as visitors. The participants reported that these interruptions influenced the continuity and efficacy of I-HOPE. Farran et al. (1995) also reported on in-hospital disruptions during the provision of psychological support – this seems to be a problem in in-hospital settings that requires specific awareness and management by the therapist.

Apart from the intrusion of outsiders during sessions, one of the participants also indicated the need to include touch during I-HOPE. Touch as a contentious and high-risk activity (Allan, 2008) may require further research – the role touch can play in the TKR context needs to be understood before guidelines can be provided on a professional level.

Another important ethical consideration that emerged from this study is the need for proper termination of I-HOPE as premature or inadequate termination of therapy can undermine the potential benefits of the treatment (Westmacott, Hunsley, Best, Rumstein-McKean, & Schindler, 2010). One of the participants reported not being ready for the termination of the therapy after discharge from hospital, suggesting feelings of abandonment. Psychologists have an ethical responsibility to terminate therapy in a responsible way as abandonment may cause harm to patients (Vasquez, Bingham, & Barnett, 2008).

5.3.2 NEW INSIGHTS IN TERMS OF ACCEPTABILITY

Based on the experiences of the 12 TKR patients, I-HOPE in its current form is an acceptable intervention as part of holistic treatment for TKR patients.



Despite the high level of acceptability of I-HOPE in its current format, findings from the study suggest that I-HOPE can be improved in the following ways.

- Therapeutic boundaries should be better negotiated and maintained in the hospital context. This would include negotiating the time, the place, and the space in which the intervention takes place.
- I-HOPE as a very brief intervention is too short/brief for the treatment of TKR patients the number of sessions and the length of the sessions should therefore be reconsidered. It may be more appropriate to develop I-HOPE as brief intervention consisting of 6-8 sessions, and a session after hospital discharge should also be provided where needed. The format of these sessions should be changed if patients cannot meet with the I-HOPE therapist due to distance and/or travel difficulties.
- Although the therapist was aware of the participants' physical needs, it appears this was not adequate for identifying those participants who were not ready for I-HOPE due to pain or fatigue. A way of addressing this problem could be to implement a pain-rating scale before each session.
- The present study highlighted the need for improved professional collaboration between the therapist and the physical health care roleplayers (physiotherapist, nursing staff, and surgeon).
- Attention should be given to the psychoeducational component of I-HOPE. This component needs to be developed further to include providing information to participants on what to expect in terms of physical and mental progress. Patients should also be educated on how to manage the emotional and physical transition to the home environment, and family members should be educated on how to support the patient at home.
- Structured termination procedures for I-HOPE should be put in place.
- Variables such as stages of change and dealing with ambivalence during I-HOPE have not been accounted for in I-HOPE. These important variables should be given attention in future interventions.
- The current study suggests that participation in I-HOPE might have been driven by the need to survive in the ambivalent participants and by the need to master in the convinced participants.



5.4 THEME 2: ATTACHMENT BENEFITS

Attachment can be defined as the advantage gained from an emotional bond based on openness, trust, and emotional support from people offering kindness and companionship in a nurturing relationship (Scioli et al., 2015; Scioli, & Biller, 2009; Scioli, & Biller, 2010). Attachment is based on "relational trust, openness and disclosure as well as intimacy and appreciation" (Scioli, & Biller, 2009, p. 35), and it is crucial to build on and maintain quality relationships to support hope (Scioli, & Biller, 2010).

In Chapter 1 (par. 1.7), I explained how I-HOPE was developed to enhance attachment in participants. In session 1, the "In-touch/In-tune" activity enabled the participants to form a bond with the therapist (establish trust) while the "Celebrate Hope" activity allowed them to share their narratives (openness) of hope to foster a sense of belonging and care (attachment). The aim was to establish a sense of belonging, trust, and openness in the therapist and hospital care environment. The following sessions built on this in order to maintain and advance the attachment component of hope. In the discussion of the results, attachment benefits can be described as the advantage the participants gained from an emotional bond between themselves and the therapist as caregiver as demonstrated through openness, trust, and emotional support (Scioli et al., 2015). Indicators of this theme included responses of the participants such as: "*I felt safe*", "could talk about", "someone who listened", "comforted me", "was there for me". The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this theme are summarised in Table 5.6 below:

WORKING DEFINITION	INCLUSION CRITERIA
The advantage gained from an emotional bond based on openness, trust, and emotional support from people offering kindness and companionship in a nurturing relationship (Scioli et al., 2015; Scioli, & Biller, 2009; Scioli, & Biller, 2010).	Data indicating how I-HOPE facilitated trust in family, friends, and/or medical experts; openness about own feelings and fears and openness by others; emotional support received (Scioli et al, 2015).
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating trust in family, friends, and/or medical experts; openness about own feelings and fears and openness by others; emotional support not from I- HOPE (Scioli et al, 2015).	I felt safe, could talk about someone who listened, comforted me was there for me etc.

Table 5.6: Theme 2 descriptions



Attachment was reported by 5/12 (42%) of the participants as having been facilitated through I-HOPE in some way. Four out of the six (67%) women and 1/6 (17%) of the men reported that attachment had been facilitated through I-HOPE. The experiences of the participants on how I-HOPE facilitated attachment during the surgery process will be discussed under two subthemes. The first subtheme relates to experiences where the participants indicated that I-HOPE helped establish a relationship of trust and openness between them and the therapist. The second subtheme relates to experiences where I-HOPE inspired hope through emotional support.

5.4.1 SUBTHEME 2.1: TRUST/OPENNESS

The willingness of a person to trust in the context of attachment is directly related to the degree of openness and disclosure towards others (Scioli, & Biller, 2003). Trust and openness are therefore the relational components that drive the hope-attachment motive (Scioli et al., 2011). Trust represents both an emotional state and a trait in people's behaviour towards others, aspiring to a deeper level of connection with a valued person, while openness and disclosure are the acts that follow on trust (Scioli et al., 2011). In line with attachment theory (Ainsworth, & Bowlby, 1991), it can be argued that people will be more likely to trust others based on their previous experiences of a secure attachment. Scioli et al. (2015) consider the openness of patients about their fears and feelings as the essence of the therapeutic relationship, which is also an important attachment resource for hope. Together with trust, openness is described by Scioli and Biller (2010, p. 64) as "a key relational skill for increasing and sustaining hope". I-HOPE set out to facilitate trust and openness between the therapist and the participants through the various activities of which the "In-touch/In-tune" activity was key in initiating the trust relationship.

This subtheme focused on instances where the participants felt that the intervention facilitated trust and openness. Responses of the participants indicating this subtheme included: "*I feel open*", "*I feel protected and safe*". The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.7 below:



Table 5.7: Subtheme 2.1 descriptions

WORKING DEFINITION	INCLUSION CRITERIA
Trust and openness are the relational components driving the hope-attachment motive (Scioli et al., 2011). Trust represents both an emotional state and a trait in people that leads to a deeper level of connection with a valued person. Openness/disclosure are the acts that follow trust (Scioli et al., 2011).	Data indicating how I-HOPE facilitated trust in friends/family/spouse/medical experts and openness about the participants' feelings and fears (Scioli et al. 2015).
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data not indicating the establishment of trust and openness between therapist and participants or trust and openness related to another source, which was not facilitated through I-HOPE.	I felt open, I felt protected and safe etc.

Trust in and openness towards the treatment team and specifically towards the I-HOPE therapist inspired hope in P12 in that it made him feel safe and that he was being taken care of by a caring community:

- Ek sou sê dit het vir my ... het daai eerste aand se besoek by my die rustigheid gebring ... jy weet, want jy hoef nie te worry nie dis reg, jy is op die regte plek, by die regte mense ... [C] (Interview P12, comment U829/831, p. 122). (That visit on the first evening gave me a sense of calm ... you know, that you do not need to worry ... it is all right, you are at the right place with the right people ...)
- So jy weet daai uitgangspunt van ek kom daar aan, weet jy wat, dis ok, jy kan rustig wees, hier is alles reg ... vir my, ja, was dit waardevol ... [C] (Interview P12, comment U834, p. 122). (The fact that I arrived here, and you know what ... it is ok, you can relax, everything is all right here ... that was important for me ...)

Three out of the 12 (25%) participants appreciated that they could talk to the therapist about anything. They felt a freedom within this relationship to express their fears and feelings, and said that it provided a break from the normal physical health-focused conversations.

Ek kon met haar [die terapeut] oor dinge praat wat ek nie met die dokters oor kon praat nie ... sy het geweet waar ek is en hoe ek voel, en waarvoor ek bang is ... [C] (Interview P9, comment U642, p. 93). (I could talk to her [the



therapist] about things which I could not share with the doctors ... she knew where I was and how I felt and what I was afraid of ...)

The value of being able to communicate freely and openly with someone who cares is evident in the following extract from P3.

Nee, sy het gesels oor alles, jou familie, jou kinders, jou gemaklik gemaak ... en ek het ook vir haar gesê ek was nog nooit bang vir operasies nie ... nog nooit 'n vrees gehad vir operasies nie ... ek is altyd agterna jammer [LAG UITBUNDIG] ... [C] (Interview P3, comment U190/191, p. 29). (No, she spoke about everything, your family, your children, made you feel comfortable ... and I told her that never before had I been afraid of surgery... never had I had a fear of surgery ... I was always sorry afterwards [LAUGHS UNINHIBITEDLY] ...)

P8 confirmed the importance of communication with the therapist:

We [participant and therapist] really just communicated ... [C] (Interview P8, comment U544, p. 81).

It seems that trust in the therapist was established through communication, inspiring a sense of safety. This made the participants feel relaxed and increased their confidence in the medical treatment team. With trust came an openness towards the therapist as a result of which the participants were able to voice there thoughts and fears more freely.

5.4.2 SUBTHEME 2.2: EMOTIONAL SUPPORT

Emotional support can be defined as the skilful person-centred provision of a close relationship characterised by kindness, love, and affection from others, which can lead to an improved emotional state (Burleson, 2008; Scioli et al., 2015). Scioli et al. (2015) consider emotional support as part of attachment resources. It is a form of social support that "satisfies the need for attachment, relieves stress, and bolsters a sense of self-worth" in a person (Chambers, Ryan, & Connor, 2001 p. 100). In Chapters 1 and 3, activities such as the "DVD", "In-touch/In-tune", "Get well Card" and the "Debrief" activities were described as facilitating the attachment needs of the participants through emotional support. In identifying emotional support as a subtheme, responses of the participants that were indicators of emotional support



included: "*It/She helped me*", "*showed interest*", "*cared for me*", and "*I valued the human contact*". The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.8 below:

Table 5.8: Subtheme 2.2 descriptions

WORKING DEFINITION	INCLUSION CRITERIA
The skilful person-centred provision of a close relationship characterised by kindness, love, and affection from others, which can lead to an improved emotional state (Burleson, 2008; Scioli et al., 2015).	Data indicating how I-HOPE facilitated emotional support through kindness, love, and affection.
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating emotional support where credit is given to kindness, love, and affection from others unrelated to I-HOPE.	It/She helped me, showed interest, cared for me I valued the human contact etc.

Five out of the 12 (42%) participants felt emotionally supported by I-HOPE. Of these participants, 17% were men and 67% were women. The participants experienced emotional support from the therapist in the form of care and warmth and connected with her on an emotional level.

P4 valued the caring connection she had with the therapist. She described the warm human contact, and the interest the therapist showed in her, as the most significant element of her I-HOPE experience.

Meer as enige terapeutiese waarde of spesifieke tegniek wat toegepas word was ... en miskien het sy dit so goed toegepas dat ek dit nie weet nie ... die blote menslike kontak en belangstelling en warmte, dit was vir my baie belangrik ... [C] (Interview P4, comment U270, p. 39). (More than any therapeutic value or specific therapeutic technique that was applied ... and maybe she applied it so well that I did not even know it ... the mere human contact and interest and warmth, that was important to me ...)

P1, who was not from the Pretoria area and had to travel some distance for the surgery, especially valued the emotional support provided by the therapist as she was away from home and her regular support system. The fact that the therapist showed insight into her circumstances contributed to her feeling of being cared for. She



emphasised that there was someone to motivate and comfort her through this experience:

- Veral omdat ek van ver af kom so ek weet sy [die terapeut] is daar, maar net die idee van hier is iemand anders wat wil regtig weet hoe ... wat omstandighede, is jy reg vir die operasie, hoe gaan jy dit hanteer, dit is nie die einde nie, daar is vorentoe ... [C] (Interview P1, comment U33, p. 8). (Especially because I came from far away, just the idea that there was someone else who really wanted to know how ... what my circumstances were, are you ready for the operation, how you are going to cope with it, this is not the end, there is a way forward ...)
- P1 concluded:
 - Ja wat, ek dink tog mense het emosioneel daai ondersteuning nodig ... [C] (Interview P1, comment U69, p. 13). (Yes, I do believe that people emotionally need that support ...)

P7 confirmed the supportive role of I-HOPE and added that it was meaningful support:

Dit was vir my goed gewees, sinvol ondersteunend ... [C] (Interview P7, comment U488, p. 75). (To me it was good, meaningfully supportive ...)

P7, who had undergone several previous surgeries, said that having someone who was supportive and encouraging during surgery was a completely new experience for her:

Ondersteunend in die sin dat 'n mens geweet het daar is iemand wat ... daar is mense wat tog belangstel en vir jou wil moed gee, moed in praat en wat ek nog nooit by 'n ander operasie gehad het nie ... [C] (Interview P7, comment U492, p. 76). (Supportive in the sense that there is someone who ... there are people who are interested and who want to give you courage, encourage you, which I never had with other surgeries ...)

The therapist was also seen as a caring outsider who inspired hope. According to Scioli et al. (2011), this perception may originate from feeling connected. P7 said:

Nommer een, dat dit iemand van buite was wat gekom het ... en mens voel jy weet daar is mense wat regtigwaar probeer om mens te ondersteun, en te help en hoop te gee ... en omdat sy dit op so 'n manier gedoen het dat mens weet dat sy gee om, sy begryp ... [C] (Interview P7, comment U501/502, p. 76). (First of all, that it was someone from outside who came ... and you feel



there is someone who really tries to support you, to help you ... and she did it in such a way that you know that she cares and understands ...)

Ek dink omdat 'n mens besef, hier is iemand wat omgee, is iemand wat regtig belangstel, dink ek as ek so kan sê ... dit het impak gemaak, dit is vir my treffend [C] (Interview P7, comment U510, p. 77). (I think because you realise, here is someone who cares, someone who is really interested, so to speak, who made an impact on me ... that I found striking ...)

The support and care that P7 experienced through I-HOPE left her feeling that there was still goodness in the world:

Daar is mense wat tog belangstel en vir jou wil moed gee, moed in praat ... so dit was goed ... [C] (Interview P7, comment U492, p. 76). (There are still people who are interested and who want to give you courage, encourage you ... so that was good ...)

The mere presence of the therapist was at times enough to enhance a sense of connectedness during the TKR process:

Net haar [die terapeut se] teenwoordigheid, net die feit dat sy elke middag daar was het gehelp ... [C] (Focus group, comment U1040, p. 151). (Just her [the therapist's] presence, the fact that she was there every afternoon helped me)

P9 experienced the emotional support she received from the therapist as very valuable as the nursing staff were often too busy to spend quality time with her. The therapist made time specifically to connect with her and to attend to her emotional needs:

Sy het 'n spesiale iets bygedra wat normale hospitaal personeel nie kan gee nie, want hulle is te besig ... so sy kon daai tien minute of twintig minute per dag wat sy met my spandeer het ... was net vir my ... jy weet terwyl die liggies [van die monitors] aangaan en alles daar, was daar vir my 'n rustige oomblik ...
 [C] (Interview P9, comment U650-654, p. 94-95). (She contributed something special which the hospital staff could not give because they were too busy ... that ten or twenty minutes per day that she spent with me ... was only for me ... you know, while the lights [of the monitors] went on and everything ... there was this moment of peace for me ...)

P9 regarded the therapist as the giver of hope and therefore a hope role model:



Jy weet die hoop wat sy [die terapeut] heeltyd vir my gegee het ... [C] (Interview P9, comment U644, p. 93). (You know, the hope that she [the therapist] gave me the entire time ...)

P12 valued the fact that the therapist could put herself to one side during the I-HOPE sessions and attend fully to his needs by placing him first. This allowed him to open up to her:

Ek het teenoor haar [die terapeut] ontdooi, oor sy is wie sy is, en sy maak wat sy maak ... toe ek na die tyd aan die ding gedink het, is die opvallende ding wat sy vir my reggekry het ... sy het daai eie 'ek', 'ek' is hier, 'ek' weet hoekom is 'ek' hier, 'ek' weet wat 'ek' hier doen, 'ek' weet wat hier gaan gebeur ... en, en, en ... jy weet hierdie ding het ek in my kop nou al lank deurgewerk ... het sy van die tafel afgehaal ... sy het die 'ek' van die tafel af gehaal ... [C] (Interview P12, comment U804, p. 119). (I opened up to her [the therapist] because of who she was, and what she did ... when I afterwards thought about it, it was remarkable what she achieved for me ... she put the 'self' to one side, the here am 'I', 'I' know why 'I' am here, 'I' know what 'I' am going to do, 'I' know what is going to happen here, and, you know ... I worked it through in my head ... she took the 'I' off the table ...)

P4 described the first session of I-HOPE as a very positive experience of emotional support. As discussed in Chapter 3, the DVD shown during this session was aimed at providing positive images and a message of hope to the participants. Together with the "In-touch/In-tune" activities and the person-centred approach, it seems that the DVD contributed significantly towards making the participants feel emotionally supported, and it [the DVD] was experienced in an overwhelmingly positive way by P4:

Ek was oorweldig deur die hoeveelheid vriendelikheid en guns wat ek ontvang het vanaf die oomblik van opname ... E [die terapeut] wat so gaaf was en belang gestel het ... wat die besonderse opbouende DVD [hoop] gewys het ... dit was soos 'n tsunami van liefde en guns wat my heeltemal uitgeboul het ... [C] (Participant diary P4, comment U297/298, p. 43). (I was overwhelmed by the friendliness and kindness that I received from the moment I was admitted ... the therapist was so kind and showed interest ... who played the



exceptionally uplifting DVD ... it was like a tsunami of love and kindness, which totally bowled me over ...)

5.5 LITERATURE CONTROL: THEME 2 – ATTACHMENT

The following section covers the findings relating to Theme 2. I will comment on aspects of the data that confirm the findings in the existing literature and point out possible contradictions in the findings of the present study. I will also share new insights obtained from the data.

5.5.1 CONFIRMATIONS AND CONTRADICTIONS OF EXISTING KNOWLEDGE IN TERMS OF THE ATTACHMENT BENEFITS OF I-HOPE

Attachment is a nurturing element in any relationship and is, in essence, based on three important components: firstly, the presence of an attachment figure; secondly, the experience of love and care (emotional support); and, lastly, the existence of trust and openness between people (Scioli, & Biller, 2009; Scioli, & Biller, 2010; Scioli et al., 2011). Trust and openness are considered integral to the therapeutic relationship and are therefore crucial for therapeutic success (Scioli, & Biller, 2009; Scioli, & Biller, 2009; Scioli, & Biller, 2010). In order to establish a hopeful therapeutic attachment, people need to establish relational trust, connection to others, and the ability to open up to them (Scioli et al., 2011). Scioli et al. (2015) view attachment as a resource of hope when established through family, friends, or professionals in a medical setting.

The findings from this study suggest that the I-HOPE participants were able to experience trust and openness in their relationship with the therapist. Openness was inspired during the intervention through the validation of the participants by making them feel special and important throughout the therapeutic engagement. In times of a health challenge such as TKR, hope is developed through the channel of attachment in two ways: openness to receiving support and trust in the support giver (Scioli, & Biller, 2010). I-HOPE specifically included the "In-touch/In-tune" activity to foster the therapeutic bond needed to connect with the participants and establish a sense of attachment. The participants said I-HOPE made them feel important, special, and safe. It was especially during the first session that the participants experienced that they were in good hands – one participant even stated that she felt overwhelmed by



the friendliness and kindness. The emotional support experienced from the therapist varied depending on what each participant valued in his or her relationship with her. Some valued the human contact with the therapist, while others felt her mere presence was enough to support them. Genuine support from outsiders who cared and gave them hope was also valued.

The "In-touch/In-tune" activity took place during the first session, and a person-centred approach was maintained throughout the intervention. The purpose of this session as described in Chapter 3 was to establish a sense of safety and connectedness to both the therapist and the hospital as a caring supportive network of professionals. Jevne (2003) contends that a serious, respectful, and committed relationship is the key to engendering hope. Several studies confirm the importance of fostering a trustful relationship during hope-based interventions (Burleson, 2008; Herth, 2000; Herth, 2001; Howell et al., 2014; Kashani et al., 2014; Larsen et al., 2015; Larsen, & Stege, 2012; Moore et al., 2014. In all these studies, the relationship with either the group or the therapist promoted hope. Similarly, the attachment benefits the participants in the present study experienced could be linked to their relationship with the therapist.

Evidence in this study confirmed the positive effect of I-HOPE in providing a sense of safety and connectedness. One participant reported that he felt he was in good hands in the hospital after the first I-HOPE session. Others reported experiencing the therapist as supportive and in tune and connected to them. Similarly, Moore et al. (2014) reported after their hope intervention in a home for the elderly that they had managed to build a sense of community in their participants. Feeling part of a community is beneficial for developing hope through attachment (Scioli et al., 2011).

Scioli and Biller (2010) view communication as a way of connecting with people that builds trust and supports health, while Trombetta and Rogers (1988) contend that openness in communication promotes people's commitment to care. Two participants in the present study referred specifically to the value of just being able to communicate with the therapist. Furthermore, evidence from the study suggested that the nature of the trust relationship was such that it inspired an openness to share thoughts and fears with the therapist that could not be shared with the doctors. Borenstein (2003) and Larsen and Stege (2012) highlight the importance of providing an environment of safety in a counselling context. Herth and Cutcliffe (2002a) regard providing emotional



comfort, listening actively, and being present as important strategies for fostering hope in cancer participants, while Lopez et al. (2004) refer to this process as hope bonding.

Dufrane and Leclair (1984) believe that a caring relationship with a therapist can instil hope and develop the courage to deal with life's challenges. One participant in the present study reported that her relationship with the therapist helped carry her through. Emotional support through I-HOPE was a theme expressed by 5/12 (42%) of the participants. Connecting with the therapist and having their individual needs attended to emerged as a source of emotional support for these participants. Scioli and Biller (2010) consider social connection a key factor in finding hope through attachment. The participants' experience of connectedness in this study supports Scioli and Biller's (2009) view that a nurturing relationship can be important also in later life.

One participant said that the therapist provided emotional support just by being present during her difficult struggle with surgical complications. According to Scioli and Biller (2009, p. 157), being present for someone literally means to "be in front of" that person.

Scioli and Biller (2009) view skilful hope providers (therapists) as being fully present and giving their undivided attention to patients. The value of the I-HOPE therapist being fully present was also confirmed by one of the participants in the present study, who said that the therapist was there just for her. Another participant reported that she greatly valued the time the therapist spent with her every day.

The emotional support of participants is crucial according to Gordon (2000). Emotional support through validation requires the unconditional validation of people's emotions (Gordon, 2000). One participant in the present study believed that the therapist's time with him was extremely valuable because he felt that his needs were placed first during these sessions. Another participant said that the therapist made her feel special through the time spent with her.

One participant reported that her relationship with the therapist during I-HOPE was more important than any techniques used during the therapy. Goldfried and Davila



(2005) found that both the therapeutic relationship and therapeutic techniques were important indicators of an intervention's therapeutic success.

5.5.2 New insights in terms of attachment benefits

New evidence from the present study confirmed that TKR patients can gain attachment advantages through I-HOPE.

The "In-touch/In-tune" activity in I-HOPE accomplished its purpose in that it enabled the TKR patients to feel safe, to trust the medical team, and to share their fears and feelings with the I-HOPE therapist.

Emotional support from the I-HOPE therapist gave the TKR patients hope. Her mere presence was a source of comfort. The TKR patients valued the interest shown in them through the emotional support they received when they had to undergo the surgery.

5.6 THEME 3: MASTERY BENEFITS

Mastery can be defined as a person's perceived level of control in response to stressful circumstances (Scioli et al., 2011; Younger, 1991). In Chapter 2 (par. 2.3.3), goal achievement and the associated ability to engage with one's environment were highlighted as facilitators of hope through the mastery channel. It was further mentioned that mastery as a skill can be taught by a skilled therapist (Scioli, & Biller, 2009; Scioli, & Biller, 2010).

TKR as a medical procedure in itself provides an opportunity for mastery through pain relief and mobility improvement as it is a viable option for maintaining an independent lifestyle (Fisher, Dierckman, Watts, & Davis, 2007; Rand, 1993; Vissers et al., 2012). Scioli et al. (2015) describe mastery resources as feelings of empowerment, inspiration, and education. They add that a focus on goals and values, collaborating with a team of experts, finding meaning and a sense of purpose, and setting priorities are likely to increase a sense of mastery during medical challenges (Scioli et al., 2015).



In Chapter 1 (par. 1.7), I elaborated on how I-HOPE was structured to enhance mastery in the participants. Session 1 was specifically devoted to engagement with the mastery motive through the use of the motivational "DVD" and the "Get Well Card" activity to address goals and barriers. In session 2, mastery was dealt with by educating the participants about the HOPE acronym during the "Buckle Up" activity, and this acronym was then also used in session 3 to consider resources for and barriers to hope to stimulate a sense of mastery. The "Becoming Aware" activity taught the participants the skill of being aware of what was happening to them and how it affected the way they thought during TKR. The responses of the participants that informed the mastery benefits theme included: "*It helped*", "gave a greater ...", "broke open", "new chance", and "full engagement". The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this theme are summarised in Table 5.9 below:

WORKING DEFINITION	INCLUSION CRITERIA
A person's perceived level of control as response to stressful circumstances associated with gaining control and dominance over the stress experience (Scioli et al., 2011; Younger, 1991).	Data indicating feeling empowered/inspired/educated via a role model, groups, or new information; collaborating with experts in a healing partnership; setting priorities to reduce the illness burden; focusing on goals and/or values; and finding purpose and meaning facilitated through I-HOPE (Scioli et al., 2015).
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating feelings of empowerment, inspiration, and education not facilitated through I- HOPE.(Scioli et al., 2015).	It helped gave a greater broke open, new chance full engagement etc.

The data reveal that 11/12 (92%) of the participants referred to mastery as a benefit experienced through I-HOPE. The participants referred mainly to feelings of empowerment 9/12 (75%), collaboration 8/12 (67%), and goal/value focus 3/12 (25%) obtained through I-HOPE, which are discussed below as the three subthemes under mastery benefits.



5.6.1 SUBTHEME 3.1: FEELING EMPOWERED

Empowerment refers to a cognitive and emotional sense of personal control and competence (Menon, 1999; Rappaport, 1987). The focus of empowerment is positive and a way of moving towards solutions rather than problems, and is therefore associated with growth and development (Kuokkanen, & Leino-Kilpi, 2000). According to Scioli et al. (2015), empowerment can be achieved through inspiration by someone or something as well as through education (Scioli et al., 2015). Inspiration can be directed towards preventing negative behaviour and promoting positive behaviour (Lockwood, Jordan, & Kunda, 2002). Morgan, Harmon, and Maslin-Cole, (1990, p. 318) describe the inspiration towards mastery as "the psychological force that stimulates an individual to attempt (a task/goal) independently, in a focused and persistent manner, to solve a problem or master a skill or task which is at least moderately challenging".

Providing information and learning is an integral part of empowering people towards the achievement of mastery (Scioli, & Biller, 2010; Scioli et al., 2015). In Chapter 1 (par. 1.7), specific activities aimed at mastery development were the DVD activity in session 1 of I-HOPE, which involved inspirational images and messages from people's lives, while the "Get Well Card" activity focused on educating the participants about goal development. In session 2, the "Hope Scouting" activity was psychoeducational in nature in that it taught the HOPE acronym, and the skill of being aware was promoted through the "Becoming Aware" activity. Indicators for this subtheme included the participants' responses, which indicated that I-HOPE gave them a sense of empowerment through inspiration or education. Words used by the participants included: "the therapist inspired me", "helped in some way", "focused", "assisted in evaluating", "removed boundaries", "carried me", "taught me to", "provided meaning and purpose", and "new chance". The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.10 below:



Table 5.10: Subtheme 3.1 descriptions

WORKING DEFINITION	INCLUSION CRITERIA
Empowerment refers to a cognitive and emotional sense of personal control and competence and a process towards mastery (Menon, 1999; Rappaport, 1987; Rappaport, 1981). Empowerment can be realised through inspiration or education by a role model, new info, or group (Scioli et al., 2015).	Data indicating that the participants felt empowered/inspired/educated by a role model, group, or new information through I-HOPE (Scioli et al., 2015).
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating that the participants felt empowered/inspired/educated by a role model, group, or new information through sources other than I-HOPE.	The therapist inspired, helped in some way raised awareness, focused, assisted in evaluating removed boundaries, carried me, taught me to provided meaning and purpose, new chance etc.

Nine out of the 12 (75%) participants felt empowered by I-HOPE through receiving either inspiration or education.

Two of the participants (P4 and P8) said that the intervention taught them the skill of being aware about what was happening to them. This seemed to have empowered them in that they were able to deal with their surgery on a cognitive level by continuously evaluating their experiences by making mental and even written notes about them. Keeping a participant diary during the process of TKR was accordingly interpreted by some of the participants as part of the intervention, and, although not specifically planned this way, it was reported to have made a positive contribution towards empowering them and raising greater awareness in them. P4 experienced empowerment through I-HOPE in that she became more aware and conscious of her experiences. She reported that evaluating her situation and making mental notes about how she experienced the surgery empowered her. She believed that her experiences of the surgery could have passed her by had she not made mental notes:

Dit help 'n mens om te evalueer dit waardeur jy gaan ... iets wat 'n mens dalk anders sou laat verbygaan andersins ... maar omdat julle my voor die tyd gesien het, was ek die heeltyd bewus daarvan om gedagte notatjies te neem van hoe ek dinge beleef en so aan en ek dink daai goed sou dalk by mens kon verbygaan ... [C] (Interview P4, comment U222-225, p. 35). (It helps a person to evaluate what you are going through, something that would otherwise pass you by ... but because you saw me before the time, I was



continuously conscious about making mental notes of how I experienced things, and I think those things could easily have passed me by ...)

P4 said that I-HOPE enabled her to break through her mental barriers and to transcend from problem thinking, thinking about being old, and thinking about the limitations her condition imposed on her physical abilities, to an ideal scenario where she felt she had a new beginning and was in control:

As jy nie kan beweeg nie, en as jy pyn het, en as jy goed nie meer kan doen nie dan begin jy jouself oud dink ... en jy begin dink in terme van ek moet dit doen ... Oo! ek kan dit nie doen nie ... jy weet dit is die hele tyd grense ... grense en nou [met die intervensie] gaan al daai goed oop ... so dis regtig vir my 'n nuwe kans ... [C] (Interview P4, comment U285, p. 41). (If you cannot move and are in pain, and if you can no longer do things, you start thinking about yourself as old ... you think in terms of, I have to do it ... Oh! I cannot do this ... you know, it creates boundaries the whole time, boundaries ... and now [with the intervention] all those things just opened up ... so this is really a new opportunity for me ...)

P4 referred to her hopeful attitude prior to the surgery and said that the DVD activity had greatly helped her positive attitude:

Die DVD was vir my in 'n groot mate ondersteunend van wat my ingesteldheid was ... [C] (Interview P4, comment U211, p. 33). (The DVD played a major role in my positive attitude ...)

P8's increased awareness and willingness to engage with his own reflections during the surgery, as reported in his participant diary, raised his awareness of his state of mind before and after the surgery; a skill that he achieved as a result of the therapist's engagement with him:

 I was very aware after theatre of my state of mind, because you had brought in E [the therapist] to actually focus on my state of mind before and after, so I was aware of my state of mind ... [C] (Interview P8, comment U556/557, p. 82).

P12 believed that the intervention empowered him to overcome his fear of the unknown before going into surgery:



Die gerusstelling en daardie onderliggende vrees van ... die vrees van die onbekende, is weg ... [C] (Interview P12, comment U866/867, p. 126). (The reassurance and that underlying fear of ... the fear of the unknown, is gone ...)

P9 felt empowered by I-HOPE to go through difficult times and overcome the barriers created by surgical complications:

Dit het nogal ... dit [die intervensie] het my ... die goed [die intervensie] het my regtig daardeur gedra ... [C] (Interview P9, comment U722, p. 104). (It was ... it (I-HOPE) ... the stuff [the intervention] ... really carried me through ...)

P10 reported that the first session of the intervention laid the foundation for the followup sessions:

Een [intervensie sessie een] het die [hoop] basis vasgelê en die opvolg het dit versterk ... [C] (Interview P10, comment U730, & U732/733, p. 105). (Session one of the intervention laid the foundation [for hope], and the follow-up sessions strengthened it ...)

P11 also viewed the first session as empowering as it made him think. During TKR this may be especially important, as Cheng et al. (2012) suggest that TKR patients may be vulnerable to cognitive decline for some time after surgery:

I definitely think it [the intervention] gave me something to think about, especially at that time [before surgery], because it was before the surgery, so I was a little bit more compos mentis ... [C] (Interview P11, comment U744, p. 109).

One of the participants referred to I-HOPE as a metaphoric light shining through the darkness:

Ek dink dit [die intervensie] het my net laat lig sien ... [C] (Interview P1, comment U17, p. 4). (I think it [the intervention] made me see the light ...)

For some of the participants the inspiration through I-HOPE came directly from the hope they experienced as a result of the intervention. According to P2:

Well it [the intervention] is important in giving hope ... [C] (Interview P2, comment U161, p. 24).



The I-HOPE sessions were an inspiration to this participant, and she looked forward to them. She added:

Dit (I-HOPE) was elke keer soos 'n hoogtepunt ... [C] (Focus group, comment U1102, p. 160). (It (I-HOPE) was like a highlight every time ...)

Empowerment for P6 came in the form of strengthening her existing hope:

Dit (I-HOPE) was tog 'n positiewe invloed om die hoop in my te versterk ... [C] (Interview P6, comment U451, p. 70). (It [I-HOPE] was a positive influence in strengthening hope in me ...)

Activities such as the "DVD", "Buckle Up", "Hope Scouting" and "Becoming Aware" activities all contained educational elements that helped make the participants aware of their internal and external resources of hope. P8 indicated that the educative component of the intervention was especially important in assisting him to interpret what was happening to him on an emotional level during TKR. Through I-HOPE he was able to focus on his own mental state. He reported that he was taught the importance of maintaining a healthy state of mind during the recovery from surgery:

To understand the state of the patient's mind and physical healing of the body after an operation, particularly a TKR, was for me an absolute eye opener ...
 [C] (Participant diary P8, comment U607, p. 90).

Four out of the 12 participants reported that the DVD activity in particular inspired them (P4, P10, P11, and P12) to maintain a hopeful emotional orientation to what was happening to them and fuel the will to hope. According to P11:

That's why I think the DVD you showed to me beforehand ... and it all forms part of feeling good about what is going to happen ... [C] (Interview P11, comment U766, p. 112).

For P10, inspiration came through the provision of a role model during I-HOPE. As he was a keen photographer himself, the "DVD" activity, which was narrated by a well-known photographer, made a particular impression on him as he could identify with the narrator as a role model. The positive images of the DVD further provided inspiration towards hope. He claimed that he could identify with the DVD's message as it was specifically supportive of what he personally valued:



Ja, dit was toevallig, of nie toevallig nie ... dit [die DVD] het die regte snare aangeraak ... ek dink die video ... die video het regtig die ding [die intervensie] body gegee ... jy weet dis nie net woorde nie ... 'n ou [DVD storie verteller] wat uit sy ondervinding praat en wat jy veral met die fotografie kan mee vereenselwig ... [C] (Interview P10, comment U715/731, p. 103/105). (Yes, it [the DVD] was by chance or not by chance ... it [the DVD] touched the right cords and gave the intervention body ... you know, it is not just words ... a guy [the DVD narrator] who speaks from experience, and I could identify with the photography element of it ...)

Assisting the participants to develop a realistic expectation of TKR during the "Buckle Up" activity was an important educational goal during the intervention (Morse, & Doberneck, 1995). P1 revealed that the intervention changed the way she thought about the TKR process. Empowerment for her therefore lay in being educated during the intervention in terms of obtaining a realistic expectation of TKR, as suggested by Morse and Doberneck (1995):

Dit [I-HOPE] het my laat besef dat hierdie operasie is ernstiger as wat ek dink ... hoe so pasiënt deurgaan, of wat is die gevolge, of hoe jy vorentoe kyk daarna ... dit was vir my interessant, ek het gedink dis sommer maar net niks, maar ek besef ook dat mense wat ander tipe operasies kry dit [die intervensie] ook baie nodig het ... [C] (Interview P1, comment U36, p. 8). (It [I-HOPE] made me realise that the surgery is more serious than I thought ... how a patient goes through it, or what the consequences are, or how you look ahead ... it was interesting ... I thought this was just nothing, but I realised that people undergoing other types of operations also need it [the intervention] badly ...)

5.6.2 SUBTHEME 3.2: COLLABORATION

Scioli et al. (2015) maintain that collaboration as a mastery resource is achieved by collaborating with doctors, a team of experts, or entering into a healing partnership. Collaboration is seen as the reciprocal ability of the patient and the medical team (including the therapist) to work together in order to achieve a desired outcome (Jahng, Martin, Golin, & DiMatteo, 2005). Evidence of how I-HOPE facilitated collaboration was seen in instances where the participants displayed increased



communication, involvement, and cooperation with the therapist during I-HOPE. The "In-touch/In-tune" activity discussed in Chapters 1 and 3 of the study was specifically planned to foster a sense of collaboration with the therapist as well as with hospital staff. Words the participants used such as, "*we could talk*", "*it made me think*", "*work with other professionals*", "*received from*" … were used as indicators of this subtheme. The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.11 below:

Table 5.11: Subtheme 3.2 descriptions

WORKING DEFINITION	INCLUSION CRITERIA
Collaboration is the reciprocal ability of the participant and medical team (including the therapist) to work together in order to achieve a desired outcome. Collaboration is characterised by improved communication and engagement (Jahng, Martin, Golin, & DiMatteo, 2005)	Data indicating that the participants perceived the intervention as beneficial in collaborating with the doctors, team of experts, or entering into healing partnerships through I-HOPE (Scioli et al., 2015).
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating that the participants perceived the intervention as beneficial in collaborating with the doctors, team of experts, or entering into healing partnerships through sources other than I-HOPE (Scioli et al., 2015).	We could talk it made me think, work with other professionals

Collaboration seems to have been an important experience for 8/12 (67%) of the participants. In the data, I-HOPE's influence could be linked only to collaboration with a team of experts and the healing partnership with the therapist and physiotherapists. In the following section, evidence is provided from the data that support this subtheme.

P12 indicated that I-HOPE challenged him to engage on a deeper level and thereby achieve growth:

Om wanneer 'n mens kan kuier ... verder as nou net die skil te kan kuier en 'n bietjie te gaan krap hieronder ... en te sê wat nou van dit en wat nou van dit en hoekom, en hoe kontroversieel dit mag wees ... maar om 'n groei op daai vlak te ervaar, want jy weet hierdie goed is nie eksakte goed nie, jy kan nie dit meet nie, jy kan nie sê hoor hier ek is nou daar nie ... want daar is nie so 'n skaal nie ... [C] (Interview P12, comment U798, p. 118). (When you can visit



... to just converse on a level below just the surface ... to scratch below the surface ... and to say what now of this and that and why, and how controversial it may be ... to experience growth on that level, because these are not exact things, you cannot measure them, you cannot say, listen, I am now here or I am now there ... as there is no such measure ...)

Sometimes just the therapist's conversation, which was not only about P11's injury or surgery, conveyed a sense of collaboration and made the time spent in hospital more pleasant:

But as I say, just the visits afterwards ... you tend to get your normal visitors, they all wanted to talk about your injury ... when she [the therapist] came, it took you away from talking just about your injury, but something else, and it definitely made the time better ... [C] (Interview P11, comment U745, p. 109).

As collaborative partner, the therapist stimulated communication and conversation by asking direct questions (explicit hope questions), which engaged the participants on a cognitive level by getting them to find collaborative answers with her as a mental health expert:

Want sy [die terapeut] het vir my gevra, hoe voel jy? ... waar is jy in jou ... waar is jou hoop? ... voel jy die hoop wat jy gehad het ... kan jy dit aanwend in jou situasie? ... [C] (Focus group, comment U1042, p. 151). (Because she [the therapist] asked me, "how do you feel? ... where are you in your... where is your hope? ... do you feel the hope you had before? ... can you apply it in your current situation?" ...)

The mere fact that the therapist was available to talk to during the TKR process seemed to have inspired P5 towards collaboration:

Dit gee vir jou gerusstelling ... om te weet, kyk daar is iemand wat saam met jou die pad stap, jy hoef nie mismoedig te word nie, want sy help jou deur die proses ... [C] (Interview P5, comment U390, p. 55). (It comforts you to know there is someone with you on the road ... you need not become disheartened as she is there to help you in the process ...)

P5 saw the I-HOPE therapist as part of a wider support network with which he could collaborate to find the motivation to get through TKR:



Dit motiveer 'n mens ... jy moet ... hoe meer motivering jy kan kry van watter kant af ook, van haar kant ... [C] (Interview P5, comment U418, p. 61). (It motivates you ... you have to ... the more motivation you can get, from wherever, also from her [the therapist] ...)

5.6.3 SUBTHEME 3.3: FOCUS ON IMPORTANT GOALS/VALUES

Goals and values represent the being and doing components (the determinants of hope) that a person displays on the path towards mastery (Scioli et al., 2015). The goal and value inspiration in this study refers to the act or process of supporting or providing someone with the motivation or a reason to do or achieve something based on their interest, which enhances self-determination (Eccles, & Wigfield, 2002). According to Scioli et al. (2015, p. 9), values as the "being" components represent being true to the self, and goals as the "doing" components represent engagement in work (tasks, activities, etc.). Eccles and Wigfield (2002) discuss the integration of values and goals under task-value theories. Task-values are dependant on intrinsic motivation, self-determination, interests, and goals that can be enhanced through interventions.

Goals and values are aspects of people's lives in which they invest on an emotional and/or physical level. Values are the accepted standards of a person that regulate behaviour, while goals are the objectives towards which energy is directed (Grusenmeyer, 2015). Goals can therefore be seen as the expressions of a person's values. Goals are also important aspects of the unidimensional understanding of how hope is developed. As discussed in Chapter 2, Snyder, Harris, et al. (1991) views hope as a process of developing pathways and agencies towards goals.

Inspiration towards goals and values is a mastery benefit, yet it should be noted that inspirational factors in the context of hope may also be present in the context of attachment, survival, and spirituality (Scioli, & Biller, 2009).

In Chapter 1 and 3, the "Get Well Card" activity was specifically aimed at goal development during I-HOPE, and these goals were revisited during the "Reclaim/Reframe" activity in session 3 to remind the participants about their stated goals in session 1. In line with Scioli et al.'s (2015) mastery resource coding system,



inspiring awareness of goals, being involved in doing something, collaborating towards achieving goals, and providing goal support were also included as aspects of supporting goals in this category. The participants' responses that indicated this subtheme included: "made me aware of", "aware of goal", "awareness of challenges", "there is more", and "I aspired to ...". The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.12 below:

Table 5.12: Subtheme 3.3 descriptions

WORKING DEFINITION	INCLUSION CRITERIA
Goals and values represent the being and doing components that a person displays towards mastery, which are determinants of hope (Scioli et al., 2015). Goal and value inspiration in this study refers to the act or process of supporting or providing someone with motivation or a reason to do or achieve something based on their interest, which enhances self- determination (Eccles, & Wigfield, 2002).	Data indicating that I-HOPE inspired or motivated the participants towards achieving goals. Any reference made by the participants to how I-HOPE inspired them towards achieving goals.
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating that the participants were inspired or motivated towards achieving goals through sources other than I-HOPE.	Made me aware of awareness of goal, awareness of challenges there is more I want to do etc.

Three out of the 12 (25%) participants (17% of the male participants and 33% of the female participants) stated specifically that I-HOPE enhanced their focus on goals/values.

I-HOPE seems to have motivated the participants to pursue their goals actively during the recovery process by raising their awareness of the importance of hope in the process. It enabled the participants to be more aware of what was happening to them and what was required of them during the TKR process. P4 described the value of the intervention as enabling her to pursue goals consciously and actively:

Dat dit (I-HOPE) jou deur die proses neem en dat jy ... ook daarmee saam die uitdagings van die herstel proses ... bewustelik nastreef ... [C] (Interview P4, comment U286-289, p. 41). (That it [I-HOPE] takes you through the process ... and together with that also the challenges of the recovery process that you consciously strive to overcome ...)



I-HOPE raised P4's awareness of the importance of setting goals with the physiotherapists. She experienced I-HOPE as valuable in terms of motivating her towards achieving these physical health goals:

- Bewusmaking van ... ook in 'n sekere sin die doelwitte wat die fisioterapeute vir my gestel het ... dat ek bewustelik deur die proses gaan ... dat ek bewustelik beleef wat ek beleef ... 'n bewusmaking dat ek bewustelik deur die proses gaan ... [C] (Interview P4, comment U242/244, p. 37). (Raising awareness of ... also in a sense the goals set for me by the physiotherapists ... that I go through the process consciously ... being aware of what I am experiencing ... raising awareness that I am going through the process fully aware ...)
- En dan die daaglikse doelwitte om by die standaarde te kom van die fisioterapeut ... dit [I-HOPE] was vir my 'n groot motivering ... [C] (Interview P4, comment U242/244, p. 37). (And then the daily goals ... to achieve the standards set by the physiotherapist ... it [I-HOPE] was a great motivational support ...)

P11 confirmed the importance of I-HOPE as a motivational tool in achieving the goals of the physiotherapy programme:

You can set targets with your physiotherapist and be motivated to hit those targets by your therapist [psychotherapist] ... [C] (Interview P11, comment U761/762, p. 111).

The intervention evidently made the participants focus on their experiences during the TKR process. P10 reported that although he did not learn new things in the course of the intervention, he felt that it organised his thoughts:

Dit [I-HOPE] het 'n mens net weer bietjie gefokus ... ek dink nie daar het vreeslik baie nuut uitgekom nie, maar dit het net 'n bietjie die gedagtes bymekaar gekry en georden ... [C] (Interview P10, comment U704-706, p. 102). (It [I-HOPE] just focused you a bit ... I don't think anything new came out of it for me, but it helped me organise my thoughts ...)

P10 said that his surgery experience was especially challenging because he was a medical doctor himself who normally found himself on the other side of the surgery process. He reported that I-HOPE helped him keep his focus:



Uit die aard van my beroep was hierdie nogal vir my ... dit was vir my 'n uitdaging ... ek is nie gewoond aan daai kant van die mes nie ... en jy moet hier deur, jy gaan hier deur en dit [die intervensie] hou jou gefokus ... [C] (Interview P10, comment U709/710, p. 102). (Due to the nature of my profession ... it was somewhat of a challenge ... I am not used to being on this side of the knife ... and you have to go through this, and the intervention keeps you focused ...)

Although I-HOPE was often more supportive of the participants' motivation in achieving goals, it seems that it also assisted P9 in developing a goal that gave her hope during a very challenging period of her TKR recovery process. She realised that she also had to be aware of her emotional wellbeing by setting psychological goals:

Ek was daarvan bewus gewees dat mens 'n mens jou psigies, hoe kan ek sê, meer doelwitte te hê om psigies oor dit te kom ... (Interview P9, comment U660/661, p. 95). (I was aware that you need ... how can I say, more psychological goals in order to overcome this psychologically ...)

In the case of P9, who struggled with severe complications, the therapist was able to use hope-goal development as a valuable cognitive strategy to help her overcome the challenges she faced while in ICU. She described this as a revelatory moment in the battle for her life:

O, sy het vir my gesê, waarna sien ek uit? ... ek onthou dit baie, baie goed ... en toe ewe skielik dink ek, o, ek kan weer 'n skildery maak [doelwit] ... [C] (Interview P9, comment U673, p. 96/97) (Oh, she asked me, what are you looking forward to? ... I remember it very, very well ... and suddenly I thought, oh, I want to do a painting again [goal] ...)

For P9, a breakthrough occurred when the therapist helped her focus, not on what had happened, but on what was waiting for her in the future. Through goal-oriented trust she was able to manage her terror and find liberation (Scioli et al., 2011). This was her moment of breaking through the barrier of a confined presence into a liberated future and is an example of where attachment, mastery, and survival were combined during therapy:

En toe het sy met my daaroor gesels en ewe skielik was dit nie, uhm ... het dit vir daai oomblik ... het dit nie meer gegaan oor [ASEM VINNIG IN] wat het nou gebeur nie ... maar wat wag ... en ewe skielik het daar vir my weer 'n, 'n iets



oopgegaan, vir die toekoms ... sodat die erg van nou 'n bietjie vaag geraak het ... sy het my in dit ingehelp daai dag ... [C] (Interview P9, comment U673, p. 96/97). (And then she spoke to me about it and, suddenly, it was not about what was happening in that moment ... it was not about what just happened [TAKES A DEEP BREATH] but about what was waiting, and suddenly something opened up for me ... for the future ... the suffering of the moment subsided ... she helped me into it on that day ...)

P9 considered this a pivotal moment during the therapeutic process, which enabled her to break out of hopelessness:

Maar my deurbraak was definitief toe sy [die terapeut] vir my gesê het, "wat wil jy weer gaan doen? ... wat maak jou opgewonde?" ... dit was vir my die draaipunt ... [C] (Interview P9, comment U686, p. 98). (But my breakthrough definitely came when she [the therapist] asked me, "what do you want to do again? ... what excites you?" ... that was my turning point ...)

5.7 LITERATURE CONTROL: THEME 3 – MASTERY BENEFITS

The following section covers the findings in the literature on mastery benefits. A similar procedure was followed to that with the discussion of Theme 1, that is, confirmation of the findings in the literature, pointing out possible contradictions in the literature, and sharing new insights gained from the literature.

5.7.1 CONFIRMATIONS AND CONTRADICTIONS IN THE EXISTING KNOWLEDGE OF THE MASTERY BENEFITS OF I-HOPE

Mastery as a theme in hope theory features prominently in the literature (Howell et al., 2014; Scioli et al., 2011; Scioli, & Biller, 2009; Scioli, & Biller, 2010). It has, in fact, been described as a central aim of goal-directed hope, as human beings generally set goals in order to master their environment (Scioli et al., 2011). Scioli et al. (2015), in their analysis of the testimonials of breast cancer patients, found that empowerment, inspiration, and education were conducive to achieving mastery. These authors added that collaboration with others, focusing on important goals/values, clarifying priorities, and finding meaning could facilitate mastery attainment. In the present study, the participants reported that they had been inspired to be hopeful by role models from the



DVD, by forming a collaborative partnership with the therapist, and by using skills that increased their awareness during the surgery process.

Wenar and Kerig (2005) maintain that hope can be inspired by the therapist becoming a source of hope. The literature indicates that a hope-therapist needs to have high levels of hope so that the therapeutic relationship can inspire hope in the patient (O'Hara, 2013; Lopez et al., 2004). In the present study, the participants experienced the therapist as a source of hope and thus viewed her as a role model of hopefulness. One of the participants described visits from the therapist as a daily highlight, and another described the intervention as providing light in a dark period of her life. Hammer et al. (2009) argue that hope is inspirational as it includes an element of becoming. They refer to this inspiring characteristic of hope as a metaphoric light, which coincidentally is how one of the participants described her experience of I-HOPE.

The "DVD" activity also provided the participants with a role model for hope. One participant reported that he was able to identify with the narrator of the DVD. The DVD was also praised generally for its ability to provide inspiration during the TKR process. One of the participants referred to the first session as laying the hope foundation on which hope could be built in further sessions. The use of a film (DVD) in combination with hope activities was also successfully used in the hope-based intervention (Living with Hope – LWHP) of Duggleby et al. (2007, 2013).

Scioli and Biller (2010) view hope as a skill that can be taught to people. Snyder, Irving, et al. (1991) describe hope itself as a thinking pattern that can be learned and which manifests in observable behaviour. Farran et al. (1995) refer to a person's rational proclivity towards being hopeful as the mind of hope. Applying one's mind through an educative process always precedes taking action towards making goals a physical reality (Covey, 2004) and stimulates intentional thinking about hope and how it can be applied (Moore et al., 2014). In this study, the participants were inspired by the educational value of activities such as "Buckle Up", "Becoming Aware", and "Hope Scouting".

As planned during the development of I-HOPE (Chapter 3), the "Buckle Up" and "Hope Scouting" activities were specifically aimed at giving the participants a more



realistic understanding of the TKR process and its related resources and barriers to hope. Some of the participants reported that the intervention enabled them to form realistic expectations of TKR and to be aware of their frame of mind. One participant said that I-HOPE made her aware of the gravity of her pending surgery and braced her to accept whatever the outcome might be. Bracing for potentially negative outcomes is described by Morse and Doberneck (1995) as a crucial psychoeducational component that can support hope in patients. According to Penrod and Morse (1997), in the early stages of developing hope in an adverse situation, the reality of the situation needs to be considered carefully and circumspectly, thereby emphasising the importance of the educational process. Miller and Powers (1988) claim that such a surveillance of reality activates both mental and physical processes to support health.

Explicit education on hope may, according to Larsen and Stege (2012), raise awareness and shift perspectives towards a desired future (hope). During the "Hope Scouting" activity, the therapist explicitly taught the HOPE acronym of Farran et al. (1995) as a skill to enhance hope awareness. In the present study, the value of the HOPE acronym was confirmed by one participant who was able to use the acronym to his advantage even one month after discharge from hospital.

Developing a mental picture of a short-term goal is described by Webb (2007) as "sound hope", which can be powerful in moving a person forward towards achieving his or her goal. Larsen et al. (2007) emphasise the value of explicit hope counselling in helping people attain hope. In this study, the therapist guided hope-goal development by putting explicit future hope-focused questions, as suggested by Larsen and Stege (2012), to a participant who was experiencing severe difficulties in her recovery process. This explicit future hope technique facilitated hope-goal development in this participant, which promoted a breakthrough in mastery. It enabled her to form a clear picture of a future goal (painting a picture) and to persevere.

The "Becoming Aware" activity in I-HOPE was specifically used to promote the cognitive engagement of the participants by enhancing awareness of the TKR processes through consciously focusing on their every-moment experiences (Shapiro, Carlson, Astin, & Freedman, 2006). Skills learned during the "Hope Scouting" and "Becoming Aware" activities were later applied during the "Mirroring" activity as a



reflective activity during the last session of I-HOPE. The experiences of several participants indicated that rational engagement facilitated through I-HOPE's educative components grounded them in thinking about hope during the TKR process. I-HOPE also seems to have established a heightened cognitive awareness in the participants. Howell et al. (2014) emphasise the importance of raising an alternative awareness in patients experiencing chronic pain, as pain may dominate their moment-to-moment experiences. The importance of raising awareness and obtaining a sense of purpose and meaning is supported throughout the hope intervention literature (Howell et al., 2014; Rustøen et al., 1998; Shin, & Park, 2007). Webb (2007) describes patient-hope as being fully aware of the journey towards a future goal – the journey in itself also being meaningful. Several of the participants in the present study reported that the intervention made them more aware of the TKR process and their mental and emotional responses during this process.

Collaboration with the therapist was a valuable resource for the participants in the attainment of mastery, and they felt empowered by having someone to share their TKR journey. The participants seemed to value the partnership role of the therapist who stimulated their thoughts, challenged them to take action, and communicated with them on a deeper level. Collaboration in a therapeutic context can be seen as a reciprocal relationship of connectedness that plays a key role in enhancing hope in the face of challenges (Yohani, 2008). Scioli et al. (2011) refer to the collaborative partnership between therapist and client, in the context of mastery, as one of gaining mediated control over a challenging environment.

Goal inspiration is central in supporting agency and the motivation of cognitive goaldirected beliefs (Snyder, Irving, et al., 1991; Snyder, Rand, et al., 2002). Snyder, Harris, et al. (1991) describe hope itself as a positive motivational state aimed at achieving goals through interaction between goal energy (agency) and goal planning (pathways). Snyder, Harris, et al. (1991) refer to this will to hope as a determination to hope, which is seen as an important aspect of goal-directed hope. Lopez et al. (2004) maintain that the cognitive hope process (goal development) can bring about change in a person. I-HOPE was also reported to have motivated the participants without being accredited for goal development as such. One of the participants reported that through I-HOPE she was able to focus actively on emotional goals as well as develop physical goals during a crisis period. It similarly inspired some of the participants to



transfer their goals to their interaction with other members of the professional team such as the physiotherapists.

5.7.2 New insights in terms of mastery benefits

As stated earlier, mastery is a person's perceived level of control in response to stressful circumstances associated with gaining control and dominance over the stress experience (Scioli et al., 2011; Younger, 1991). Goal achievement and the associated ability to engage with one's environment are facilitators of hope. Mastery can also be facilitated by a skilled therapist (Scioli, & Biller, 2009, 2010).

Several resources for mastery were identified as helpful in I-HOPE by the TKR participants. Firstly, role models of hope were identified in the DVD and in the person of the therapist – with the therapist becoming a source of hope. Secondly, the educational role of the "Buckle Up" and "Hope Scouting" activities braced the TKR participants for the hardships to come and prepared them to be realistic in their expectations. Thirdly, the use of explicit future hope-teaching techniques was valuable in developing hopeful goals that could act as a buffer against hopelessness when hardships were experienced. Fourthly, the skills learned during the "Hope Scouting" and "Becoming Aware" activities facilitated rational engagement in the TKR participants and made them aware of their emotional responses, which, in turn, improved survival benefits where awareness was important for emotional regulation. Fifthly, the role of the therapist as collaborator in the TKR journey was a key resource for facilitating mastery. Finally, the skills of goal development were applied to developing emotional goals and thus psychological coping. This could also translate to attaining physical goals. Working with the physiotherapists may for example translate into gaining control and mastery over TKR.

The first session in I-HOPE was crucial for establishing a hopeful mind-set towards TKR and facilitating mind shifts from problem-saturated thoughts about illness and despair towards hopeful futures.



5.8 THEME 4: SURVIVAL BENEFITS

Survival in this theme has been defined as the continuation of one's ability to selfpreserve and take part in life – this may include emotional and physical regulation and generating options through the self or others (Scioli, & Biller, 2009; Scioli et al., 2015). Self-preservation and reality negotiation are mentioned by Scioli and Biller (2009) as important components in buffering life's painful experiences during a survival situation. TKR is a major surgical procedure described by McDonald et al. (2004) as stressful for patients. The prevalence of anxiety and depression in TKR may be even higher than that reported in other surgical conditions (Nickinson, Board, & Kay, 2009).

As described in Chapter 3 (par. 3.3), the intervention played a central role in emotional regulation during the TKR process through the "Buckle Up" and "Debrief" activities. As such, I-HOPE aimed at enabling salvation from hopelessness and providing emotional protection. It further aimed at providing coping skills by generating options, regulating emotions, and assisting the participants to overcome barriers. Responses of the participants that were indicators of this theme included: "*I was able to use it in other situations*", "gave me different ways to view or think about". The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this theme are summarised in Table 5.13 below:

WORKING DEFINITION	INCLUSION CRITERIA
Survival is defined as the continuation of one's ability to self-preserve and take part in life; this may include emotional and physical regulation and generating options through the self or others (Scioli, & Biller, 2009; Scioli et al., 2015).	Data indicating how I-HOPE facilitated options generated by self and others, emotional regulation by self and others, and physical regulation by others (Scioli et al, 2015).
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating options generated by self and others, emotional regulation by self and others, and physical regulation by others through sources other than I- HOPE (Scioli et al, 2015).	I was able to use it in other situations gave me different ways to view or think aboutetc.

Table 5.13: Theme 4 descriptions

Six out of the 12 (50%) participants reported that I-HOPE assisted them on a survivalhope level. Survival in the data was identified in instances where the participants referred to how I-HOPE enabled them to generate options (17%) and/or helped them



with emotional regulation (50%). These experiences will be discussed below under the subthemes generation of options/alternatives and emotional regulation.

5.8.1 SUBTHEME 4.1: GENERATION OF OPTIONS/ALTERNATIVES

Generation of options is defined as the functional component of divergent and creative thinking, which can be seen as the ability to think laterally by generating more than one option or alternative, either by the self or others (Egan, 2014; Jones, Kelly, May, & Cinderby, 2009; Scioli et al., 2015). Generating options is critically important in the facilitation of change in psychological interventions as it is related to cognitive fluidity and pathway development towards goal achievement (Scioli et al., 2015; Snyder, Harris et al., 1991). Responses of the participants that typically indicated this subtheme included: "*I was able to take from it what worked and apply it*", "*it provided an alternative*", "*it made me consider other options or ways*". The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.14 below:

Table 5.14:	Subtheme 4.1	descriptions
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WORKING DEFINITION	INCLUSION CRITERIA
Generating options is defined as the functional component of divergent and creative thinking, which can be defined as the ability to think in a lateral way by generating more than one option or alternative, which can be generated either by the self or others (Egan, 2014; Jones, Kelly, May, & Cinderby, 2009; Scioli et al., 2015).	Data indicating that I-HOPE enabled the participants to generate options either by allowing them to do so independently or by providing them with alternative ways of thinking.
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating how sources other than I-HOPE enabled the participants to generate options either by allowing them to do so independently or by providing them with alternative ways of thinking.	I was able to take from it what worked and apply it it provided an alternative it made me consider other options or ways etc.

Two of the men, representing 17% of the overall participants and 33% of the male participants, referred to I-HOPE's usefulness in generating options. It seems that the "Hope Scouting" activity (Chapter 3, par. 3.4.2) assisted one of the participants with cognitive reappraisal in that it enabled him to interpret his situation in more positive terms while the other participant was able to use the skills he learnt from I-HOPE selectively depending on his needs.



P11 reported that the intervention helped him think differently about his knee surgery by shifting his thinking from being problem focused to thinking of his surgery as a step towards recovery:

It was nice to talk to her ... and it gave me some different ways of looking at what was going on ... you know, you tend to get stuck in the idea that you have got a problem with your knee and you need to have it fixed ... talking to her kind of brings you out of that ... looking at it from a different point of view, you know looking at it [the surgery] as to say it's a progression at getting better ... [C] (Interview P11, comment U740, p. 108).

P11 was then able to transfer his skill of thinking divergently about the process of surgery to looking differently at the pain he was suffering:

It kind of gave you a different way of thinking about what is going to happen to you before the time [session one], and it gave you something else to think about when you are struggling with the pain and everything afterwards ... and a different way of looking at the pain ... when she [the therapist] came in you kind of realised it's just a progression to being somewhere else at a later stage ... you know, being healthy down the line ... and it helps a lot afterwards as well ... [C] (Interview P11, comment U746/748, p. 109).

Generating options was also facilitated through the psychoeducational learning process in I-HOPE. P12 referred to the value of the psychoeducational HOPE acronym, used in the "Buckle Up" activity, which was developed by Farran et al. (1995) as part of their hope process framework. P12 stated that he was also able to use it in a different context after the surgery as he saw it as a workable cognitive tool that he had memorised:

Ek het gehou van die HOPE-ding [akroniem] ... jy haal daaruit wat vir jou werk, dink oor dit, deurdink dit en jy, uh, êrens langs die pad steek dit in jou kop vas en jy dink, hey maar weet jy, daai ding ... ek het dit daar gebruik en dit het daar gewerk ... [C] (Interview P12, comment U850/851, p. 124/125). (I liked the HOPE-thing [acronym] ... you can take from it what works for you, think about it, think it through, and somewhere along the road it sticks in your head and you think, hey ... you know, that thing ... I used it there ... it worked there ...)



5.8.2 SUBTHEME 4.2: EMOTIONAL REGULATION

Emotional regulation is the ability to shape emotional responses in terms of which emotion is experienced, when it is experienced, and how it is experienced (Gross, 2014). This would typically include finding ways to stay calm and become less anxious and fearful (Scioli et al., 2015). Emotional regulation has both a self-regulatory and a guided regulation component to manage illness-related distress (Cameron, & Jago, 2008; Leventhal, Musumeci, & Leventhal, 2006). The term emotional regulation can be quite complex, but in this subtheme I will restrict it to data where the participants indicated that I-HOPE enabled them to stay calm, addressed their fears, and soothed their anxiety. Examples of where I-HOPE supported the participants in regulating their emotions were identified in this theme through responses such as *"brought me back from hopelessness"*. The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.15 below:

Table 5.15:	Subtheme	4.2 descriptions
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WORKING DEFINITION	INCLUSION CRITERIA
Emotional regulation is the ability to shape emotional responses in terms of which emotion is experienced, when it is experienced, and how it is experienced (Gross, 2014). This would typically include finding ways to stay calm and become less anxious and fearful (Scioli et al., 2015).	Data indicating how I-HOPE assisted the participants to find ways to stay calm and be less anxious and fearful (Scioli et al., 2015).
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating sources other than I-HOPE which assisted the participants to find ways to stay calm and be less anxious and fearful (Scioli et al., 2015).	Raised awereness of my experience brought me through made me happy etc.

Six out of the 12 (50%) participants stated that I-HOPE played a role in their emotional regulation. I-HOPE facilitated emotional regulation for some of the participants by providing them with a channel through which they could get rid of their emotions and change their emotional responses from feeling ill or feeling sorry for themselves to having more positive and happy thoughts, and to evaluate their emotional responses objectively. Five of the participants reflected on the role of the therapist as a guide in the regulation of emotions. The following extracts illustrate this.



P1 shared her emotional experiences from the first session by saying how they progressed from feeling excited after the first session and the "DVD" activity to feeling sorry for herself and crying with pain after the surgery. She believed that it was better to express her emotions and make sense of them. She concluded that if she had not had the I-HOPE therapist, she would have made herself sick with her negative thoughts. It was especially previous traumatic experiences with other surgeries and the fear of returning to work that threatened her emotional regulation. She credited I-HOPE with her new found ability to shape her emotional responses to think only happy thoughts:

- Ek was opgewonde na die video [DVD] ... nou huil ek weer a.g.v. die pyn wat onder beheer sou wees ... asook selfbejammering ... ek voel of ek terug is waar ek was ... [C] (Patient diary P1, comment U74, p. 15). (I was so excited after the DVD ... now I am crying once again due to the pain that should have been under control ... I also feel self-pity ... I feel as if I am back where I was ...)
- Want ek voel kry die emosies liewers uit op 'n verstaanbare manier [die intervensie] as wat ek dit opkrop ... [C] (Interview P1, comment U61, p. 12). (*I* feel I should rather get rid of my emotions in an understandable way [the intervention] than keep building them up inside ...)
- Het ek jy [die terapeut] nie ontmoet nie sou ek net hier gelê en my siek gedink het aan al my ellende ... vorige traumas met operasies en dan die vrees van teruggaan werk toe... nou hou ek my gedagtes op "happy places" ... [C] (Interview P1, comment U110, p. 17). (Had I not met you [the therapist], I would have been lying here, thinking myself sick about all my worries ... previous traumas with surgery and then the fear of going back to work ... now I keep my thoughts in happy places ...)

P8 confirmed the value of I-HOPE in stimulating positive thoughts by recording in his participant diary how I-HOPE helped him shift his focus away from negative thoughts:

Yes, it [I-HOPE] definitely raised awareness in me, and I suddenly made notes about it ... translating my experience onto paper [the participant diary] ... made me think about it and not focus too much on the negative ... [C] (Interview P8, comment U558/594, p. 82/86).



The "Becoming Aware" activity was aimed at teaching awareness to the participants. P4 indicated that I-HOPE enabled her to regulate her emotions by being more selfaware of how she responded to situations:

In Groter bewustheid en om jouself van buite jouself dop te hou om te sien hoe jy in 'n situasie reageer ... [C] (Interview P4, comment U223-226, p. 35). (An increased awareness ... to observe yourself from outside yourself and to see how you respond in a situation ...)

Emotional regulation has two components: self-regulation and guided regulation. P1, P8, P9, P11 and P12 specifically stated that the therapist guided their emotional regulation through I-HOPE. P9 reported that the therapist was able to bring her back from emotions of hopelessness by reminding her about what was still to come (the future). She added that it was not a spontaneous process for her to refocus herself on hope and that she needed to be reminded by the therapist to do this:

En dan het sy my teruggebring [van hopeloosheid], maar ek het nie outomaties deur die proses gedink, uhu, ek moet op hoop fokus ... hoop na die tyd en waar ek gaan wees nie ... 'n mens moet herinner word ... [C] (Interview P9, comment U682/687, p. 98). (And then she brought me back from hopelessness, but it did not happen automatically ... I did not just think to focus on hope ... I had to be reminded ...)

P9 had a similar experience to P12 in that she needed the therapist to regulate her emotions from hopelessness to hope:

Ek dink dit hang af waar jy is in die proses ... die eerste ruk was vir my uur tot uur ... hoop wat ek moes hou ... en ek het dit kort-kort verloor ... jy weet die feit ... want sy [die terapeut] het dit ook vir my teruggebring en gesê kom ons praat oor wat is jou hoop, waar fokus dit ... en dan het sy my teruggebring [van hopeloosheid] ... [C] (Interview P9, comment U681/682, p. 98). (I think it depends where you are in the process ... at first you take things hour by hour ... I had to hold on to hope ... I lost it every now and then ... the fact that the therapist could bring me back from hopelessness and we could talk about where my hope was focused ... it brought me back from feeling hopeless ...)

One of the biggest challenges (boundaries) for some of the participants was pain after surgery. Pain acceptance and catastrophising pain can play a significant role in debilitating patients after TKR (Vissers et al., 2012). P11 reported that the I-HOPE



therapist guided him in regulating his thoughts about his pain by not allowing them to take over his mind:

She [the therapist] gets my head around the fact that you must just go from day to day ... and we went on from there ... and then it's just a case of getting into your head and, you know, making sure the pain isn't everything ... [C] (Interview P11, comment U759, p. 111).

Tension was sometimes experienced on a physical level, and the participants felt that the intervention helped them relax more. P8 reported on this in the individual interview as well as in his diary:

- As she began to talk to me, I actually realised that I was a bit tense, and I started to get a tension headache ... I didn't realise it, and she spoke to me for about an hour and when she left I felt relaxed ... I felt a big difference between before she came and after she left ... I found a difference in myself ... [C] (Interview P8, comment U534, p. 80).
- By the time E [the therapist] had left, my headache was gone and my shoulders had relaxed ... that is the only difference I felt before and after the intervention ... the shift was ... my tension headache and pain in my shoulders had left ... [C] (Interview P8, comment U540/541, p. 81).
- Had she not been there (GRASPS HIS CHIN), uhm, would I have got into a more tense state? ... I don't know, but when I went in the morning I was pretty relaxed ... [C] (Interview P8, comment U597, p. 87).

Emotional regulation by the therapist in the form of relieving stress and anxiety was also experienced by P1, who was anxious before the surgical procedure:

Dit was 'n besturing dat julle [die intervensie] daar was ... ek sou wragtig nie so gecope het ... hoe sou ek dit hanteer het? ... ek weet wraggies nie ... [C] (Interview P1, comment U11, p. 2). (It was an act of providence that the intervention took place ... I would not have coped ... how would I have handled it? ... I really don't know ...)

P12 reported that I-HOPE relaxed him and brought calm to his thinking. He gave the therapist credit for the way in which she was able to calm him:

Maar sy het verseker 'n besonderse talent ... ek het 'n baie lekker, 'n rustigheid in haar teenwoordigheid ervaar, wat my na die tyd laat besef het, joe, maar



dis, dis sinvol hierdie, want jy weet my kop ... ek is uitgesort ... [C] (Interview P12, comment U790/791, p. 117). (She certainly has a special talent ... I felt relaxed in her presence ... that made me realise, this is meaningful ... it sorted out my head ...)

En daai rustigheid ... ek moet sê was opvallend, 'n lekkerheid vir my ... ek het besef, jo, hierdie ding [die intervensie], daar is 'n plek vir dit ... [C] (Interview P12, comment U806/807, p. 119). (The relaxation she brought was remarkable, a treat for me ... I realised this thing [the intervention] has a place ...)

5.9 LITERATURE CONTROL: THEME 4 – SURVIVAL BENEFITS

Similarly to what was done with the previous themes, the following section covers the findings on survival benefits. This includes confirming the findings with those in the literature, pointing out possible contradictions, and sharing new insights gained from the literature.

5.9.1 CONFIRMATIONS AND CONTRADICTIONS OF EXISTING KNOWLEDGE ON SURVIVAL BENEFITS THROUGH I-HOPE

Scioli et al. (2015) describe the important role that generating options and regulating emotions can play as resources of hope. They contend that the ability to generate options through oneself and others can assist in attaining survival hope. Self-regulation also allows individuals to engage with their environment in a hopeful way (Scioli, & Biller, 2009). In the present study, survival benefits were experienced by the participants when the therapist supported them in developing the skill of generating alternative solutions to their problems and emotional self-regulation. The therapist also succeeded in releasing tension and anxiety by talking to the participants. Skills used for survival were reflective awareness ("Becoming Aware" activity), the use of the HOPE acronym of Farran et al. (1995) ("Hope-scouting" activity), and the realistic assessment of the TKR challenge ("Buckle Up" activity).

Scioli et al. (2015), as well as Morse and Doberneck (1995), consider envisioning alternatives an important factor in the development of hope. In this study, the therapist helped the participants through I-HOPE to move towards cognitive reappraisal of their



current situation of hopelessness and despair due to pain and also towards hopefulness and healthy expectations. One participant, in particular, explained how he was able to use the HOPE acronym as a technique to help him generate alternative solutions for use during difficult times.

The skill of awareness was reported by three of the participants who said that this skill played a key role in keeping them focused and assisting them to regulate their emotions. The skill of awareness was reported on by several participants in their participant diaries indicating how it helped them shape their emotions. Herth (2001) and Duggleby et al. (2007) mention the value of diaries/journals as a medium for supporting patients through challenging physical experiences. The participant diaries in this study were not used as a therapeutic tool, but the study certainly raised awareness of their potential value as an additional therapeutic technique for use in I-HOPE.

One of the participants wrote in her participant diary that she was able through I-HOPE to overcome previous traumatic surgical experiences by keeping her thoughts positive. Another participant said that the reflective skills learnt through I-HOPE enabled her to see and evaluate her own actions from outside herself, suggesting awareness through objective self-reflection. This enabled her to regulate her thoughts and emotions during TKR. Kashani et al. (2014), in their hope-based intervention among breast cancer patients, also found such intervention helpful in raising awareness of hope and enabling emotional regulation. Hope and coping are considered by Farran et al. (1995) as two interconnected elements since hope is simultaneously an antecedent to coping as well as a coping strategy.

The value of I-HOPE in regulating stress and anxiety was evident in the experiences reported by some of the participants. Five of the participants said that the therapist helped them relax before surgery. One of the participants indicated that his headache – a symptom of anxiety – disappeared after the first I-HOPE session. Nickinson et al. (2009) confirm that anxiety is prevalent in TKR patients. Kagan and Bar-Tal (2008) state that interventions, particularly those engaging with patients on an emotional and cognitive level, relieve uncertainty and anxiety. With anxiety ultimately leading to hopelessness, it can often manifest in physical symptoms such as muscle tension, heart palpitations, inactivity, and apathy (Ruchiwit, 2012). A reduction in pre-operative



and post-operative anxiety by relaxing patients may decrease their experiences of post-surgical pain – such interventions are especially important in setting patients at ease before and after surgical procedures (Lim, Yobas, & Chen, 2014; Nickinson, Board, & Kay, 2009; Sjöling, Nordahl, Olofsson, & Asplund, 2003).

Weis and Speridakos (2011), in a recent meta-analysis of 27 hope-based intervention studies, found no significant association between hope interventions and decreased psychological distress. However, the experiences of the participants in the present study, although not quantitatively measured, appear to contradict these findings, with some of the participants reporting a decrease in anxiety and stress due to the I-HOPE sessions held with them. Further research is needed in this regard before conclusive evidence can be provided.

One of the participants reported that the I-HOPE therapist helped liberate her from hopelessness by reminding her about the hope in her. Another reported that he was able to overcome the overwhelming thoughts of pain through the therapist's interaction with him. One of the participants reported that she was invited by the therapist to change the way she was thinking about a situation and, in doing so, was able to break through the limitations of her mind-set that were creating barriers towards hope. Liberation beliefs are strongly associated in the literature with the orientation or trait of a person to survive (Scioli et al., 2011). Especially during a medical challenge, people may be more inclined to experience anxiety due to stressors such as the fear of surgery, anaesthetics or complications, reduced cognitive ability, and decreased mental awareness (Ruchiwit, 2012; Thomas, & Sethares, 2010).

The HOPE-IN intervention of Rustøen et al. (2011) reported decreased distress in the participants, and this decrease continued even when they were assessed at three and 12-month intervals after the programme. Larsen and Stege (2012) contend that overcoming barriers and thinking about future possibilities is an important aspect of the journey towards hope. A shift from the present towards recognising future possibilities can bring about hopeful perspective change in people (Larsen, & Stege, 2012).



5.9.2 NEW INSIGHTS IN TERMS OF SURVIVAL BENEFITS

As stated earlier in this chapter, emotional regulation is the ability to shape emotional responses in terms of which emotion is experienced, when it is experienced, and how it is experienced (Gross, 2014). This typically includes finding ways to stay calm and become less anxious and fearful (Scioli et al., 2015). Further to this, emotional regulation has both a self-regulatory and guided regulation component (Cameron, & Jago, 2008; Leventhal, Brisette, & Leventhal, 2006).

Evidence from this study indicates that I-HOPE facilitated emotional regulation with the TKR participants by enabling them to shape their emotional responses in terms of which emotion they wanted to experience. The role of the therapist in the regulation of the TKR participants' emotions was especially important in regulating their emotions from hopelessness (pain) to hope (recovery).

It also emerged that emotional regulation during TKR surgery is something that needs to be dealt with throughout the process of surgery since the ability to self-regulate emotions when pain is intense is difficult and comes and goes. It was especially important for the participants in the present study to have the I-HOPE therapist to guide them in their emotional regulation.

The "Hope Scouting" and "Buckle Up" activities were valuable in facilitating the generation of optional thinking and in enabling cognitive reappraisal, which allowed the TKR participants to generate more positive and hopeful future scenarios thus liberating them from their pain and assisting their recovery.

Skills learnt during I-HOPE were selectively applied based on what worked for the participants, and these skills were also transferred to other situations in everyday life thus extending the holding environment created by I-HOPE beyond the surgery.

5.10 THEME 5: SPIRITUAL BENEFITS

Spiritual benefits can be defined as benefits associated with people's quest for a higher meaning and/or belonging by expressing their core values and may include any form of religiousness or spiritual expression related to receiving strength from God's



connected presence, being reminded of the goodness of the universe, or setting a lasting example of courage/dignity (Scioli et al., 2015; Sperry, 2001; Weisman de Mamani, Tuchman, & Duarte, 2010). As mentioned in Chapter 3, spirituality can, but does not always, include religion. However, the spiritual side of a person is deeply rooted in that person's personal belief system, which directly influences hope (Scioli, & Biller, 2009).

According to Scioli and Biller (2009), spirituality can tap into multiple sources of faith including a higher power, the self, others, technology, nature, institutions, diversity, and equality. Scioli et al. (2015, p. 9) identified the following as spiritual resources of hope, which were also considered during the data analysis used in this study: "empowered or strengthened by God or higher power/force"; "close to or connected with God"; "comforted by the presence of God"; "reminded of or pointed to the goodness of the world"; and "healing via setting a lasting example of courage to others". The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this theme are summarised in Table 5.16 below:

WORKING DEFINITION	INCLUSION CRITERIA
Benefits associated with a person's quest for a higher meaning and/or belonging in expressing his or her core values and may include any form of religiousness or spiritual expression related to receiving strength from God's connected presence, being reminded of the goodness of the universe, or setting a lasting example of courage/dignity (Scioli et al., 2015; Sperry, 2001; Weisman de Mamani, Tuchman, & Duarte, 2010).	Data indicating how I-HOPE helped the participants feel empowered/strengthened by or feel closeness/connectedness with God/higher force/power; were reminded about or pointed to the goodness of the world; found healing through setting a lasting example of courage to others (Scioli et al, 2015).
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating the participants' feeling empowered/strengthened by or close or connected with God/higher force/power; were reminded about or pointed to the goodness of the world; found healing through setting a lasting example of courage to others, through sources other than I-HOPE (Scioli et al, 2015).	Sent by God the Lord's presence, prayed with me etc.

A spiritual awareness during I-HOPE was experienced by 4/12 (33%) of the participants. This was expressed through an awareness of God strengthening and comforting them and reminding them that the world was a good place. This theme will



be discussed under two subthemes: comfort in God's presence and being reminded of the goodness of the world.

5.10.1 SUBTHEME 5.1: COMFORT IN GOD'S PRESENCE

Scioli et al. (2015) state that the comfort people experience through the presence of God or a higher power gives them strength when faced with medical challenges. God's presence can be understood by feeling God to be present in the immediate personal vicinity. Responses of the participants indicating this subtheme included: *"sent by God", "aware of the Lord's presence"*. The working definition, inclusion and exclusion criteria, and the responses of the participants that were used as indicators for this subtheme are summarised in Table 5.17 below:

Table 5.17: Subtheme 5.1 descriptions

WORKING DEFINITION	INCLUSION CRITERIA
Strengthened through the belief in God's presence (Scioli et al., 2015).	Data indicating how I-HOPE facilitated participants' experience of feeling comforted by God's presence.
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating how sources other than I-HOPE facilitated participants' experience of feeling comforted by God's presence.	Sent by God aware of the Lord's presence etc.

Four out of the 12 (33%) participants referred to instances where I-HOPE reminded them about the comfort of knowing that God was present in their lives.

The following extract from the interview with P7 indicates that the intervention strengthened her belief that God was with her.

Dit [die intervensie] het mens net weereens versterk ... en dat 'n mens besef, die Here was regtig by jou ... [C] (Interview P7, comment U524, p. 79). (It [the intervention] just strengthened you once again ... so that you realised, the Lord was with you ...)

P1 felt that I-HOPE was an act of providence:

Dit [I-HOPE] is nie vir my nie sommer net 'n normale ding wat gebeur het nie
 ... ek glo absoluut dat julle was gestuur ... [C] (Interview P1, comment



U57/58, p. 12). (It [I-HOPE] was not just a normal thing that happened ... I absolutely believe you were sent ...)

She added that I-HOPE was sent by God:

So dis, ek glo die Here wat geweet het ... hierdie vrou het nou iemand nodig ... dis mense wat verstaan hoe my emosionele vlak is ... dit is daai vertrouens verband van dit is geestelik, dit is veilig ... [C] (Interview P1, comment U58, p. 12). (So, I believe, the Lord knew that this woman now needed someone ... people who understand my emotional level ... it is that trusting bond ... that it is spiritual, it is safe ...).

In the Christian faith, hope is one of the central virtues. The following extract from the focus group interview highlights the extent to which hope was revered by some of the Christian participants.

Hoop is amper belangriker as geloof ... want as daar nie hoop is nie kan daar nie geloof wees nie ... en selfs [MAAK KEEL SKOON – KOM EMOSIONEEL VOOR], selfs in die swartste situasies, as jy hoop het dan kan jy daar deur kom ... [C] (Focus group, comment U1127, p. 164). (Hope is almost more important than faith ... because if there is no hope there can be no faith ... and even [CLEARS THROAT – APPEARS EMOTIONAL], even in the darkest of situations, if you have hope, then you can get through them ...)

5.10.2 SUBTHEME 5.2: REMINDED OF THE GOODNESS IN THE WORLD

Being reminded of or discovering the goodness of the world/universe can be seen as a daily belief that is strengthened through experiencing someone or something as a messenger or ambassador of hope and can directly relate to being able to see a higher value in the universe (Scioli, & Biller, 2009; Scioli et al., 2011). Scioli et al. (2011) link the kindness in the universe to people's feelings of connectedness with the world, which makes them open in their attitude towards the world. The extent to which a person experiences the universe as a good place may form part of the building blocks leading to spiritual integrity. Scioli and Biller (2009) describe this as hopeful resilience, which helps a person stay committed to a purposeful and meaningful life. Responses of the participants that indicated this subtheme included: "*she prayed when I was at a low*", "*someone cared*", "*I felt like royalty*", "*the value attached to a patient*". The working definition, inclusion and exclusion criteria, and the responses of



the participants that were used as indicators for this subtheme are summarised in Table 5.18 below:

WORKING DEFINITION	INCLUSION CRITERIA
Being reminded of or discovering the goodness of the world/universe can be defined as a daily belief that is strengthened through experiencing someone or something as a messenger or ambassador of hope and can directly relate to being able to see a higher value in the universe (Scioli, & Biller, 2009; Scioli et al., 2011).	Data indicating that the participants were reminded about the goodness of the world/universe through I- HOPE.
EXCLUSION CRITERIA	PARTICIPANT RESPONSES
Data indicating that the participants were reminded about the goodness of the world/universe through sources other than I-HOPE.	She prayed when I was at a low etc.

Two out of the 12 (17%) participants reported on experiences that could be related to their being reminded about the goodness of the world. The therapist's engagement in providing person-centred support seemed to have moved the support towards engagement on a spiritual level by praying for those participants who needed it or doing something kind that was beyond her duty as a therapist. This kindness made the participants feel valued and acted as a source of hope that there was still some goodness in the world. The following extracts from the data support this theme.

Maar die feit dat sy saam met my kon bid, dit was vir my besonders ... ek het gedink, miskien sal dit nou nie vir iemand anders ... jy weet, dieselfde beteken nie, maar vir my het dit besonder baie beteken ... [C] (Interview P7, comment U508/509, p. 77). (The fact that she was able to pray with me was remarkable ... I thought, you know ... it might not have the same meaning for everyone ... but for me it meant a great deal ...)

P7's belief in her religion and connectedness to her world is clear from the following extract in my diary.

An aspect that stood out with P7 is the very deep family connectedness that she displayed. In fact, she was quick to point out that she believed that even the previous generations whom she experienced as very hopeful and positive people, played a huge role in her own ability to remain hopeful. Another very important factor in her life is her faith and relationship with God. She expressed the importance of her husband's life of faith and how much it



supports her on a spiritual, emotional and even physical level. (Researcher's journal, comment U1147, p. 180).

The therapist, in an act of kindness, bought sweets for P9 to sooth her dry throat, thus reminding her that there was someone who cared about her:

- Eendag was my mond so droog ... en toe het sy vir my gaan lekkertjies koop en dit gegee ... [C] (Interview P9, comment U650-654, p. 94-95). (One day I had such a dry throat ... she [the therapist] then went out and bought me some sweets and gave them to me ...)
- En elke keer as ek enetjie gesuig het, het ek gedink ... iemand het omgegee dat my mond droog is ... [C] (Focus group, comment U676, p. 97). (Every time I sucked on one of the sweets, I thought ... someone cared that my mouth was dry ...)

The holding environment that was created by I-HOPE, and the multiprofessional engagement with the patients, made P4 feel special and important, especially the day before the surgery during the first session of the intervention:

Ek het soos royalty gevoel die dag voor die tyd [die chirurgie] ... al hierdie aandag ... ek het ook gedink die waarde wat geheg word aan 'n pasiënt, 'n mens is nie gewoond daaraan nie ... [C] (Focus group, comment U1103/1104, p. 160). (I felt like royalty the day before [the surgery] ... all that attention ... I thought about the value they attach to the patients ... one is not used to this ...)

5.11 LITERATURE CONTROL: THEME 5 – SPIRITUALITY

Similarly to what was done with the previous themes, the following section covers the findings on spirituality benefits. This includes confirming the findings with those in the literature, pointing out possible contradictions, and sharing new insights gained from the literature.



5.11.1 CONFIRMATIONS AND CONTRADICTIONS OF EXISTING KNOWLEDGE IN TERMS OF SPIRITUALITY BENEFITS DURING I-HOPE

Empirical studies have shown that religion is most often turned to when people face a major crisis (Kusner, & Pargament, 2012). In a study conducted among oncology patients, Rawdin, Evans, and Rabow (2013) found psychospiritual factors to be more predictive of hope levels than pain symptoms. This may be because spirituality concerns what people consider sacred to them (American Psychological Association, 2013). A study by Mackenzie, Rajagopal, Meibohm, and Lavizzo-Mourey (2000) found that especially older people's religious beliefs may significantly influence their psychological wellbeing and that their subjective experience of spiritual support may be vital to their health. Although the participants in this study were aware of the important role that spirituality played during TKR, only four of them made specific reference to the role of I-HOPE in supporting them spiritually. I-HOPE was interpreted by two of the participants as God supporting them through TKR. God was seen by one of the participants as the provider of I-HOPE, and I-HOPE was accordingly described as an act of providence. The therapist became a source of spiritual comfort and reinforced the sense that God was with them.

Ottaviani et al. (2014) explored hope in chronic patients with kidney disease and found that spirituality was closely associated with a sense of hope. They highlighted the importance of spirituality in patient care delivery. Duggleby et al. (2012), in their qualitative meta-synthesis of hope, found that spiritual support was important in acquiring hope, especially for older adults with chronic health conditions. According to Fromm (1968) in Farran et al. (1995), faith needs hope to be sustained. This was confirmed by one of the participants who stressed the high value she placed on hope to sustain her faith; she believed these two components of being human (faith and hope) were inseparable. In fact, she regarded hope as a prerequisite for having faith. Although I-HOPE supported spirituality in the participants, it is not clear from this study to what extent an existing sense of spirituality was the driving force behind their general experience of hopefulness, rather than I-HOPE.

In their study, Duggleby et al. (2013, p. 7) found that a sense of "someone bigger" supported the participants in their intervention. Baumgardner and Crothers (2010) cite



a sense of connectedness with God as a key aspect of religious expression. Christians specifically view hope as life in the presence of God (Cutcliffe, & Herth, 2002a). The present study confirmed the role of I-HOPE in fostering a sense of God's presence in the lives of some of the participants and that God was in control of their surgery.

Nekolaichuk et al. (1999) consider the personal spirit as an important dimension of hope, and Scioli et al. (2011) link the spiritual dimension of hope to a person's belief system. The belief that the world or universe is a good place is emphasised by Scioli et al. (2015) as beneficial in supporting hope in people on a spiritual level. The sense that the world is good has also been described by Webb (2007) as belonging to patient hope and is important on the journey towards achieving future goals. The present study indicated that I-HOPE, in the hands of a skilled therapist, can foster a sense of the goodness in the world. Empathic interpersonal responses (Egan, 2014), such as praying with patients or bringing them physical relief during hardship, reminds them of the goodness that exists in the world.

Despite various studies indicating spirituality as an important theme in patient care (Dufault, & Martocchio, 1985; Duggleby et al., 2012; Herth, 2001; Scioli et al., 2015), few have reported on the experiences of participants in an intervention that supported them in this regard (Results of first multicenter trail of intercessory prayer, healing touch in heart patients, 2005). In the present study, the therapist openly supported those participants who were in need of prayer. Laird (1992) in Rand and Cheavens (2009) describes the benefits of spirituality in coping with health problems, and two of the participants in the present study, it was found that cardiac patients displayed better clinical outcomes after prayer (Prayer, noetic studies feasible; results indicate benefit, 2001; Results of first multicenter trail of intercessory prayer, healing touch in heart patients, 2005). Although prayer has often been associated with beneficial health effects in patients and is widely used, few scientific studies have engaged with this topic fully (Results of first multicenter trail of intercessory prayer, healing touch in heart patients, 2005).



5.11.2 NEW INSIGHTS

As stated earlier in this chapter, spiritual benefits are benefits associated with a person's quest for higher meaning. This may include any form of religiousness or spiritual expression related to being "empowered or strengthened by God or a higher power/force"; "close to or connected with God"; "comforted by the presence God"; "reminded about or pointed to the goodness of the world" (Scioli et al., 2015; p. 9).

Evidence from this study revealed that I-HOPE was a source of spiritual support to some of the participants and that I-HOPE was valued to the extent that it was described as an act of providence.

The importance of being empathically in tune with a patient's needs sends a message to the patient that on a spiritual level there is goodness in the world, which promotes spiritual benefits.

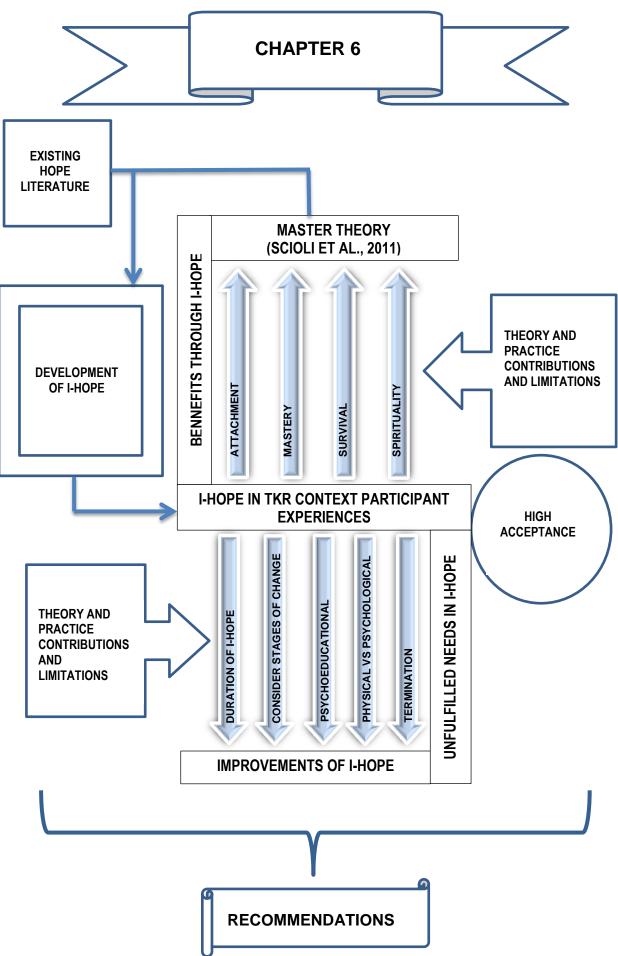
The prudence of the medical team in including an intervention such as I-HOPE in the holistic treatment of TKR patients tells them that they are valued and important, which, in turn, acts as proof that there is still goodness in the world.

5.12 CONCLUSION

This chapter reported on the research results and compared them with those in the literature in terms of their congruencies, contradictions, and contributions. It presented and discussed the results of the themes as they emerged from the data after the thematic analysis, revealing factors that could be important in delivering hope intervention in a TKR environment. By highlighting the importance of the hope intervention through the participants' positive experiences, and also by pointing out various limitations in the intervention, this research was able to provide insight into aspects of the intervention perceived as important by the participants.

The findings confirmed and expanded on those in the existing literature on hope intervention thus broadening our views on how such intervention is regarded in this context. This could be especially useful in the goal development needs of patients. Chapter 6 covers my research conclusions and recommendations.







Chapter 6 Case Conclusions and Future Avenues

6.1 INTRODUCTION

This study set out to describe how hope theory could be used to structure I-HOPE for TKR patients. The study also sought to explore and describe the experiences of 12 TKR patients at a private hospital in Pretoria of the I-HOPE intervention. As stated in Chapter 1, a review of the literature on hope-based interventions revealed the following research hiatuses: all the reviewed studies reported on hope-based interventions in group formats with no reports on individual interventions. Furthermore, most of the interventions were not very brief (as defined in this study). Hope-based medical interventions were also generally carried out by psychiatric nurses as members of a multidiscipinary team.

In addition, research studies on hope interventions were quantitative in nature where patient rating scales were used to indicate the effect of hope interventions on patients' levels of hope. Some studies included questionnaires on patients' perceptions of the interventions with only a few using interviews to explore patients' experiences. Furthermore, from a psychological point of view, the quantitative hope rating scales used in the assessment of the interventions did not include Scioli et al.'s (2011) channels of attachment, mastery, survival, and spirituality. Finally, none of the hope-based interventions focused specifically on TKR.

This study endeavoured to address these research hiatuses by describing a brief hope-based in-hospital intervention (I-HOPE). It thus moved away from the existing unidimensional and multidimensional conceptualisations of hope intervention towards an integrative approach. This was done by conceptualising a hope intervention based on Scioli et al.'s (2011) four-channel system of hope (attachment, mastery, survival, and spirituality) and by integrating components of existing hope interventions such as the hope process framework and the universal developmental components of hope intervention for a psychoeducational hope-based intervention (Farran, Wilken, & Popovich, 1995; Morse, & Doberneck's, 1995).



Exploring such an intervention in respect of TKR had not been attempted before. The very brief nature of the intervention in the present study was further unique in that it focused on an in-hospital process. The study also deviated from previously explored hope interventions as it did not focus on group-based intervention but on intervention on an individualised level.

The study sought to answer the following two primary questions: How did hope theory inform I-HOPE for 12 TKR participants? and What were 12 TKR participants' experiences of I-HOPE at a private hospital in Pretoria?

In this final chapter, the research questions are answered and the theoretical implications and contributions of the study discussed. I also reflect on the limitations of the study and consider my role as researcher. Finally, recommendations are made in terms of research practice and policy, followed by some concluding reflective remarks.

6.2 REFLECTING ON THE RESEARCH QUESTIONS

6.2.2 DESCRIPTIVE RESEARCH QUESTION How did hope theory inform I-HOPE for 12 TKR patients?

Existing hope literature (Scioli et al., 2011; Yohani, & Larsen, 2012) points out the value of Scioli et al.'s integrative hope theory as an aid in discovering and conceptualising the multiple complex dimensions of hope a client and a therapist may encounter during therapy. The present study further explored the value of this theory and specifically how it can be applied in the treatment of TKR patients. Chapters 2 and 3 covered the comprehensive exploration, discussion, and application of hope theory in general and, more specifically, the integrative hope theory of Scioli et al. (2011) and existing hope-based interventions. The descriptive question of the study was to a large extent answered in Chapter 3, but I will nonetheless touch on the most salient conclusions that emerged from the literature review and design of I-HOPE.

I borrowed from existing interventions in the field of nursing sciences and psychology and applied the evidence-based activities and techniques from these interventions to Scioli et al.'s (2011) integrative hope theory in the form of I-HOPE. The activities and techniques were linked to the integrative theory of Scioli et al. (2011) in terms of these



authors' channels of attachment, mastery, survival and spirituality. Table 6.1 summarises the relationship between the 10 I-HOPE activities and Scioli et al.'s (2011) integrative hope theory.

As stated in Chapter 1, I-HOPE, based on the above integrative theoretical framework, served the purpose of expanding and maintaining hope in order to provide a buffer against problems and promote an enhanced sense of freedom (Scioli, & Biller, 2009, 2010; Scioli et al., 2011). The sessions were named in accordance with the metaphor of building a house of hope through finding hope, bonding for hope, enhancing hope, and reminding about hope (Lopez, Floyd, et al., 2000). The activities and techniques and their relationship to Scioli et al. (2011) are shown in Table 6.1.

I-HOPE ACTIVITIES	ACTIVITIES' RELATION TO THEORY
"DVD"	The DVD was informed by related interventions in the field of nursing, while its psychoeducational components were grounded in uni- and multidimensional psychological theory. The "DVD" activity aimed at supporting the participants' need for mastery during the TKR process.
"In-touch/In-tune" (bonding)	This psychosocial activity was borrowed from both nursing and psychology, where it has been used especially in multidimensional contexts. The activity aimed at supporting the participants' need for attachment during the TKR process.
"Celebrate Hope" (hope narrative)	This activity was informed by narrative interventions from nursing and from uni- and multidimensional hope theory in psychology. It aimed at supporting the participants' need for attachment during the TKR process while also facilitating the spiritual meaning-making process.
"Get Well Card" (goal setting)	The goal-focused nature of this activity was informed by the extensive hope literature on the uni-dimensional psychological understanding of hope. This activity aimed at supporting the participants' need for mastery during the TKR process.
"Buckle Up" (assessing reality)	This psychoeducational as well as cognitive-behavioural activity was based on nursing intervention literature and was similar to cognitive reframing in psychology. The idea of assessing reality is found in the hope-related nursing literature of Morse and Doberneck (1995). This activity aimed at supporting the participants' need for mastery and survival during the TKR process.
"Debrief" (after surgery)	This cognitive-behavioural activity was informed as a hope strategy by the psychology and nursing literature. It aimed at supporting the participants' need for mastery and survival during the TKR process.
"HOPE Scouting" (learning about hope)	This psychoeducational activity was informed by research in the field of nursing sciences and was the educational component in Farran et al.'s (1995) intervention. It aimed at supporting the participants' need for mastery during the TKR process.

 Table 6.1: I-HOPE as informed by hope theory



Reclaiming/Reframing (cognitive and affective support session)	This cognitive-behavioural activity was informed by both psychological and nursing literature. It aimed to support the participants' need for mastery during the TKR process.
"Becoming Aware" (mindful)	This activity was informed by the literature on psychological multidimensional hope theory and nursing literature. The work of Duggleby et al. (2007) and Shin and Park (2007) also informed this existential/spiritual-based activity. It aimed at supporting the participants' need for mastery and spirituality during the TKR process.
Mirroring (guided reflection)	This activity was based on similar activities mentioned in almost all hope- based intervention studies. It aimed at supporting the participants' need for mastery and/or spirituality during the TKR process due to its potential for meaning making.

This study contributes to existing theory as it demonstrates the compatibility between Scioli et al.'s (2011) integrative hope theory and current ideas on how to foster hope in patients during in-hospital hope interventions.

Purely on a theoretical level, I could conclude that I-HOPE can be used to facilitate fundamental hope through attachment, mastery, survival and spirituality. However, the hermeneutic circle has not yet been completed, and only after consideration of feedback from the 12 TKR participants, which follows in the next section, will I be able to arrive at a full conclusion about I-HOPE.

6.2.2 EXPLORATORY RESEARCH QUESTION

What were 12 TKR patients' experiences of I-HOPE at a private hospital in Pretoria?

This question will be answered by answering the secondary research questions on the experiences of the 12 TKR participants regarding I-HOPE.

6.2.2.1 Secondary question 1 How acceptable was I-HOPE to the 12 TKR ?

Acceptability of an intervention as an indicator of the success of the intervention has been reported on in the literature (Drieschner, 2004). Hope-based studies conducted in medical contexts that have used acceptability scores as indicators of usefulness have also been reported on (Duggleby et al, 2007; Herth, 2001; Rustøen et al., 1998). These studies used engagement (completion rate) and level of helpfulness



(usefulness) as indicators of the acceptability of their interventions. The above researchers reached their conclusions based on quantitative Likert-style questionnaires, unlike the present study, which relied primarily on the participants' experiences. Nevertheless, the studies of these researchers can still be used as a guideline by similarly evaluating the acceptability of I-HOPE by analysing its completion rate and level of helpfulness.

The acceptability of I-HOPE in the present study was determined based on the frequency with which the participants found I-HOPE useful, valuable, sensible, and so on. The experiences of 83% of the participants, who reported that they found I-HOPE useful as well as the fact that 100% of the participants completed the intervention, showed that I-HOPE in its current format was a successful intervention. The high acceptability of I-HOPE indicates the high level of engagement of the participants with I-HOPE, their readiness for change, and their striving towards fulfilling their need for mastery over the challenges they might have encountered during the TKR process. Mastery over the challenges of TKR was an important building block for the participants in attaining fundamental hope (Scioli et al., 2011).

Ambivalence towards I-HOPE was expressed by 17% of the participants. As pointed out in Chapter 5, ambivalence towards an intervention reflects the individual's attitude towards the intervention and also the level of engagement with it. Fear of stigmatisation, especially by men, the stage of change in which an individual is still contemplating the value of an intervention, and personal beliefs and values regarding the intervention are all plausible explanations of why the participants in the study experienced ambivalent feelings towards I-HOPE. However, I concluded that in this specific study there was no conclusive explanation for the ambivalence as the topic was not further explored with the participants.

The findings of the study suggest that I-HOPE can be improved by ensuring that it meets the needs of TKR patients more effectively. Therefore special attention should be given to negotiating and maintaining clear therapeutic boundaries. This would include negotiating the time, place, and space in which the intervention takes place, and dealing with the boundary confusion that may arise as a result of consulting patients in their hospital beds. The study highlighted the real-life challenges of balancing the needs of the participants with standards of ethical conduct. This should



remain the ethical responsibility of the therapist, yet the in-hospital nature of the intervention makes this a systemic challenge requiring attention on multiple levels – managerial, multiprofessional, and the need for patient education to align the intervention with the provision of ethical holistic health care.

Specific shortcomings in the current activities and structure of I-HOPE were identified by the participants on the basis of which they recommended (a) increasing the number of sessions and the duration time per session, (b) including patient rating scales for personal progress evaluation and to inform the therapeutic process, (c) refining the psychoeducational component of I-HOPE by educating patients and family members on the emotional and physical transition from the hospital to home, (d) extending I-HOPE beyond the in-hospital context to include a session to provide support after hospital discharge, and (e) including structured termination procedures to prevent feelings of abandonment.

The fact that the participants expressed a need to spend more time with the therapist through more and longer sessions as well as a continuation of I-HOPE after discharge from hospital suggests that their need for attachment to a significant person in the role of therapist was not fully met by I-HOPE in the current format. Similarly, the need expressed by the participants to be able to monitor their own physical progress, the need for greater collaboration between members of the multiprofessional team, and the need for more psychoeducation on their discharge to the home environment suggest that the participants' quest for mastery during TKR was also not fully met by I-HOPE in the current format.

These refinement needs expressed by the participants and specifically (a) and (d) have implications for I-HOPE's current definition as a very brief in-hospital intervention. Since the findings indicate the participants' wish for more in-hospital sessions as well as sessions beyond the hospital environment, changes may be needed in I-HOPE's conceptualisation. However, I believe that it is still possible to deliver I-HOPE as a brief intervention by adding two in-hospital sessions and, with some creative thinking, a session beyond the hospital environment. With mobility and sometimes geographical distance problems that have to be overcome, other forms of support such as mobile phones or the internet could be considered with due consideration to ethical implications.



In conclusion, the acceptability responses of the participants indicate the need for I-HOPE in the treatment of TKR. The participants' level of engagement with I-HOPE confirmed their attainment of fundamental hope in that their needs for attachment, mastery, survival, and spirituality were met as part of their holistic treatment during the TKR process (Scioli et al. 2011).

6.2.2.2 Secondary question 2

How did I-HOPE via the channels of mastery, attachment, survival, and spirituality support the 12 TKR patients?

This question will be answered by dealing with the four channels of hope under separate headings. This is done purely for practical reasons, and does not imply that the four channels are considered as separate or isolated from one another.

(a) Attachment

The importance of attachment in relationships, whether with family members or a caring therapist, and how this can promote emotional support and trust is well documented in numerous research studies (Scioli, & Biller, 2009; Scioli, & Biller, 2010; Scioli et al., 2011). Attachment in a therapeutic relationship influences relational trust and openness, and trust and openness is a fundamental requirement of a therapeutic relationship.

As stated in Chapter 5, Scioli et al. (2015) consider attachment a resource for hope. Attachment as such a resource was established during the very first session of I-HOPE through the "In-touch/In-tune" activity and was maintained throughout the I-HOPE sessions through the care given by the I-HOPE therapist. The first session of I-HOPE, as pointed out by the participants, was the most critical in that it established feelings of trust and openness and made the participants feel safe.

The emotional support, trust, and openness that the participants experienced through I-HOPE was therefore a powerful resource for inspiring hope during their surgery.



(b) Mastery

It is well known that human beings set goals for mastering their environment and that empowerment, inspiration, and education promote the achievement of mastery (Scioli et al., 2011). Mastery in I-HOPE, as pointed out in Table 6.1 of this chapter and in other chapters, was supported by the "DVD", the "Get Well Card", the "Buckle Up", the "Debrief", the "HOPE Scouting", the "Reclaim/Reframe", the "Becoming Aware", and the "Mirroring" activities.

These activities established a hopeful core by making the participants feel empowered, inspired, and educated via role models in the DVD and through the therapist. They also provided them with valuable information and facilitated a collaborative healing partnership between the I-HOPE therapist and the participants. They also focused on pursuing goals and values the participants regarded as important to make them feel they were in control.

The findings of the study suggest that mastery was facilitated through the participants having role models of hope (as observed in the DVD and the therapist) and through activities that helped them brace themselves for hardships yet to come – activities that also taught them to have realistic expectations by explicitly teaching them hopeful strategies. This helped the participants develop hopeful goals that could carry them through times of hardship. Teaching rational engagement and making the participants aware of their emotional responses, in turn, benefited survival through emotional regulation.

The role of the therapist featured prominently in the feedback from the participants – being able to collaborate with her in a caring partnership was a powerful resource for mastery. A too strong emphasis may have been placed on the collaborative relationship between the I-HOPE therapist and the participants to the detriment of other collaborative relationships such as the relationship with the physiotherapist. This could be a barrier to the attainment of perceived control and mastery if the participants were not supported on all levels in their treatment process.

I believe that TKR patients' perception of control (mastery) should be reinforced over all sessions as medical problems may change these perceptions. The present study



indicated, however, that the first session in an intervention is crucial for establishing a hopeful mind-set and for making patients feel empowered and optimistic that they will overcome their medical setbacks.

(c) Survival

Self-preservation and being able to negotiate reality through emotional and physical regulation by oneself and through others lies at the heart of survival and is a buffer against painful experiences (Scioli, & Biller, 2009; Scioli et al., 2015). A major challenge to survival faced by the participants in this study was self-regulating their emotions and their responses when they experienced feelings of hopelessness and despair due to pain after surgery. During times of increased pain and anxiety, they needed the I-HOPE therapist to guide them in shaping and regulating their emotions to be able to relax and visualise hope and recovery.

The I-HOPE activities of "HOPE Scouting" and "Buckle Up" helped in the generation of alternative thoughts about their situation and also in the generation of more positive and hopeful futures where they would be liberated from their pain and the restrictions of their medical condition.

I concluded that emotional regulation during TKR is something that has to be addressed in every session after surgery when the ability to self-regulate diminishes as a result of pain and that the role of the therapist in acting as a guide in emotional regulation is crucial in maintaining hopeful thinking after surgery.

(d) Spirituality

Spiritual benefits are associated with a person's quest for higher meaning, which may include any form of religiousness or spiritual expression whether this is to feel empowered or strengthened by God or a higher force, to feel close to or connected to God, to feel comforted by His presence, or to be reminded of the goodness in the world (Scioli et al., 2015).

The findings of the study suggest that the spiritual gains from I-HOPE depended on how each participant was able to make sense of their spiritual experience in relation to



his or her own spiritual framework. For some, I-HOPE was a gift from God while others experienced the care of the therapist and the prudence of the medical team in providing them with I-HOPE as a sign that there was still goodness in the world.

I concluded that the message of care and the belief that there were people who cared and who were used by God as a vessel to protect the participants by attending to their emotional wellbeing in a medical environment facilitated hope through spirituality rather than any specific technique used in I-HOPE.

I end this discussion on the secondary question by stating that although it was clear that the participants experienced benefits from I-HOPE that could be related to the four channels of hope as defined in Scioli et al.'s (2011) integrative theory, it is difficult to attribute these benefits solely to Scioli et al.'s (2011) integrative approach to hope. I agree with Worgan (2013) that one needs to consider other factors as well. In this study, one such factor could be the relational support provided by the therapist and her supportive, hopeful, and enduring presence throughout the TKR process as a source for the development of fundamental hope in the participants.

6.3 CONTRIBUTIONS

6.3.1 CONTRIBUTIONS TO RESEARCH

The descriptive component of the study contributes to research in the following ways: the development of I-HOPE adds to our research knowledge by providing the first described in-hospital hope intervention for TKR patients based and developed on the integrative theoretical understanding of hope by Scioli et al. (2011). I-HOPE thus moved from the existing unidimensional and multidimensional conceptualisations of hope intervention towards an integrative approach (Scioli et al., 2011). In doing so, I-HOPE was able also to present a merger between nursing and psychological hope and hope intervention theory by developing I-HOPE based on Scioli et al.'s (2011) four-channel system of hope (attachment, mastery, survival, and spirituality) while also integrating components of the existing nursing hope intervention literature such as the hope process framework and the universal developmental components of hope into a psychoeducational hope-based intervention (Farran, Wilken, & Popovich, 1992; Farran, Herth, & Popovich, 1995; Morse, & Doberneck's, 1995).



The study contributes further to research in that it provides a comprehensive review of existing hope theory and hope-based intervention research in psychology and nursing that may be of use in future hope-based studies.

As a contribution to qualitative health psychology, the study demonstrates how integrative hope theory can be operationalised in a medical context. It contributes to hope theory by providing an answer to the hiatus pointed out in the literature between the theoretical conceptual knowledge of hope and the theoretical application of hope through the practice of hope. It contributes to hope-based intervention by describing an individualised hope intervention conducted in the field of psychology.

The study contributes to health psychology by presenting a hope-based intervention administered in a field (TKR) that falls outside what is normally associated with hope intervention such as oncology, palliative care, and gerontology. It also describes the first very brief hope-based intervention in a TKR in-hospital context delivered by a psychologist thereby expanding our knowledge of patient experiences of such an intervention. As stated in Chapter 1, most of these interventions took place in sessions of 60 to 120 minutes a week over a perion of between five and eight weeks with the participants as hospital outpatients. Therefore by describing the intervention, the study contributes qualitatively to our understanding TKR patients' experiences of a very brief hope-based intervention.

The study contributes to our understanding of very brief hope-based interventions in a medical context by showing that a four-session intervention was too brief for the participants in this study. Despite the fact that very brief hope-based interventions outside medical contexts have been reported as successful, the present study's findings seem to support the need for an increase in the intervention's contact time and frequency thus redefining it as a brief (not a very brief) intervention. These findings are supported by the use of longer interventions in fields such as oncology and palliative care. In Chapter 1, it was argued that longer sessions with patients could be problematic due to the in-hospital environment. It seems, however, that the participants did need longer and more sessions despite the challenges associated with interventions after discharge.



The answers to the exploratory research questions gave a unique insight into the participants' experiences of how hope was developed and/or sustained during the TKR process as a result of the hope intervention. Although quantitative studies have indicated distinct benefits of hope for TKR patients (Engel et al., 2004; Hartley et al., 2008; Taylor, 2011), hope intervention has not been used in the field of TKR, nor has any qualitative study explored it in this specific field (TKR). The focus of this study on describing and exploring I-HOPE in the TKR context, as a procedure that promotes hope is contrasted with previous studies exploring such interventions. As mentioned such studies were often conducted in the context of imminent life-threatening conditions such as cancer (Anbar, & Murthy, 2010; Herth, 2001; Rustøen et al., 2011). In this way the current study contributed to the knowledge base on hope-based intervention literature.

Due to the study's specific sampling criteria, a unique insight is given into the needs of patients in terms of hope development during medical challenges in later life, which is a neglected field of study in psychology research (Ong et al., 2006). As elaborated on in Chapter 1, I-HOPE contributes further to the field of positive psychology by promoting a positive future-directed psychological construct as strength within the medical environment as a nonpharmacological intervention option (1.1).

This study also contributes to existing research by describing and exploring for the first time an individual intervention delivered in a one-on-one setting. This is in contrast to the group intervention mode of delivery frequently encountered in hope-based intervention literature.

6.3.2 CONTRIBUTIONS TO PRACTICE

The study provides psychologists with a structured hope-based intervention, based on an integrative understanding of hope, as an example for use in a hospital practice. This is by no means the only way interventions with TKR patients can be structured, but it provides a starting point from which other similar interventions can be launched. It is hoped that this example will stimulate creative thinking by other practitioners.

The study provides clear guidelines on how I-HOPE can be improved, based on the qualitative and meaningful experiences of the 12 TKR participants. The experiences of



these participants can also help holistic health care practitioners better understand the needs and challenges of TKR patients.

The study highlights the importance of multiprofessional collaboration during the delivery of holistic health care, the importance of considering ethical standards while delivering psychological interventions in an in-hospital environment, and the importance of patients' readiness for change during TKR.

Something practitioners should bear in mind when attending to TKR patients is the importance of the first session of an intervention in creating a positive mind-set in patients. The present study also provides evidence of the significant role of the therapist in giving emotional support to TKR patients, who are often at risk of developing mental health problems during the TKR process.

Lastly, this study can contribute to in-hospital policy on a managerial level to improve holistic health care. It acknowledges the systemic challenges associated with providing psychological care in a hospital environment and the key role of the managerial team in facilitating such care. It also provides policy makers with valuable insight into how to improve in-hospital care and highlights the value of holistic health care during TKR. It may therefore inform policy and future financial health investments.

6.4 REFLECTING ON THE POSSIBLE LIMITATIONS OF THE STUDY

Limitations that I encountered in the research process and over which I had little control are discussed in this section. Several limitations were experienced in the data collection process as some of the participants were unable to complete their participant diaries in the hospital due to surgical complications or associated pain or fatigue – this posed a threat to the depth of our understanding of their experiences. In an attempt to solve this problem, I allowed those participants who attended the semistructured interview and who were not able to complete their diaries in the hospital to reflect on their experiences during the interview. Another strategy I employed was to request the participants via email to send me their diaries.



Conducting the semistructured interview on the same day as the one month follow-up appointment with the orthopaedic surgeon meant that some of the participants had to spend a long time in the waiting room of the surgical practice before they could join me for the interview. They also had an in-hospital physiotherapy session scheduled on this day, which meant further delays and also physical pain. Although most of the participants could be interviewed after these consultations, some found the long day too exhausting for them and had to be interviewed at a private venue of their choice the following day. I do not think that this necessarily compromised the value of the data gathered.

Most of the participants also did not attend the focus group session three months after the surgery due to prior commitments or lack of commitment to the research at that stage. Despite rescheduling several times to accommodate more of the participants, it was still difficult to get the participants to return after three months to attend the focus group session. I therefore had to settle for a much smaller sample than I had initially hoped for and had to change my data collection strategy to a mini-focus group. This was not ideal as more reliable information could have emerged from a larger group discussion.

Access to a wider, more equitable sample would also have added to the application value of the findings of the study. Although it was not part of the initial planning, the fact that the participants came from the white minority group in the South African population with access to private health care could also be viewed as a limitation. Racial disparity in seeking TKR in South Africa was not found in the literature, yet in the United States of America, it is reported that African American arthritis patients receive TKR at a lower rate (less than half) than do white Americans (Chang, Mehta, Rosenberg, & Scrimshaw, 2004; Katz, & Losina; 2005).

Medical problems encountered during the TKR process clearly placed limitations on how the participants reported on their experiences. It was especially cognitive decline after surgery that influenced the participants' ability to recall details of the intervention.

Despite attempts to engage the participants in a manner that would allow them to feel comfortable in reflecting on their experiences about I-HOPE in an open and honest way, some of the participants might still have felt the need to give positive and socially



acceptable feedback on I-HOPE for fear of disappointing me. This reaction is especially problematic in qualitative research – I deal with this problem later in my recommendations for future research.

6.5 RECOMMENDATIONS FOR FUTURE RESEARCH

Based on the findings of the study, the following recommendations are made for future research.

- A qualitative research study which explores the experiences of TKR patients regarding the improved format of I-HOPE. Possible changes that should be researched are providing longer and more sessions (6-8); extending I-HOPE after hospital discharge; using patient rating scales to monitor patients' progress and pain levels; providing psychoeducation to patients and family members on what to expect during the TKR process and after discharge from hospital.
- Pre- and post-test intervention research is needed to determine the effectiveness of I-HOPE in influencing patients' levels of hope, using a quantitative hope measure.
- A mixed-methods study should be carried out to explore patients' experiences during interviews combined with quantitative data by means of a rating scale. This rating scale should be completed anonymously and returned in a selfaddressed envelope to the researcher.
- I-HOPE should be researched when used with other medical procedures to see whether the results differ from those of the present study.
- Research should be done on using random sampling to include people with diverse ethnic, cultural, geographical, and educational backgrounds. Research at public hospitals should also be undertaken.
- Research should be conducted to determine the best way to help TKR patients monitor their own physical progress during recovery and also to determine how I-HOPE or similar interventions can assist in a collaborative monitoring process.
- Research should be done on the need for and use of support groups for TKR patients after discharge from hospital.



- I-HOPE and similar interventions in the field of TKR should be researched by means of longitudinal multimethod studies specifically focused on the intervention phase. This could allow the monitoring of patient hope while also casting light on the period after discharge from hospital.
- An investigation is needed on the similarities and differences between the fundamental hope experiences of patients with differing non-life threatening health and medical problems.
- Additional research would assist us in understanding how internalised role models from youth enhance patients' hope experiences when faced with adversity.
- Research should be conducted among TKR patients to determine their educational needs during TKR.
- Research is needed to explore the role of social stigmatisation, especially among male patients, in people opting for or refusing preventative interventions such as I-HOPE.
- Research should be done on the viability of using a brief structured interview to determine the stage of change experienced by a participant in I-HOPE before continuing with the intervention.
- Research is needed on the value of including motivational interviewing during
 I-HOPE as a way to address ambivalence regarding the intervention.
- Research should be done on mechanisms for structuring the contact time with TKR I-HOPE patients within the schedule of a hospital.
- Research should be undertaken on the effectiveness of family-oriented psychoeducational support sessions for TKR patients.
- Research is needed on how best to assess pain and fatigue before each I-HOPE session to assist the therapist in evaluating the feasibility of the session.

6.6 CONCLUSION

Describing a very brief hope-based in-hospital intervention for TKR patients was a necessary academic endeavour as all the studies I had reviewed pointed to a gap or hiatus in the literature on such an intervention. TKR surgery generally has psychological consequences which, to date, have not been studied by researchers.



Too often, medical treatments focus on curing what is wrong or sick instead of tapping into those traits that make us strong, resilient, and hopeful. Positive psychological transformation in the field of psychology has brought with it shifts in how we conceptualise both preventative and curative patient care. In line with this positive psychological shift the current study suggests that fundamental hope can be fostered effectively through using a more integrative approach within a medical context. In this study it was culminated through both the development of I-HOPE and exploring lived experiences of its participants. The value of I-HOPE is well illustrated by the following quotation from a participant in the study.

"And then she spoke to me about it and suddenly, it was not about what is happening in that moment ... it was not about what just happened, but about what is waiting and suddenly something opened up for me ... for a future... the suffering of the moment subsided. She helped me into it on that day."

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TOTAL KNEE REPLACEMENT PATIENTS' EXPERIENCES OF A BRIEF HOPE-BASED IN-HOSPITAL INTERVENTION

by

ALFRED HAUPT DU PLESSIS

APPENDICES

Appendix A

Definitions of hope's relation to the integrative hope theory (Scioli et al., 2011)

Appendix B

Schedule of the semistructured interview

Appendix C

Full electronic version of the research interviews made available electronically

Appendix D

Research information document (RID) and Informed Consent Form (ICF) (Patient Participant) Part II: Certificate of Consent

Appendix D

Consent by Orthopaedic Surgery practice for participation in research study (Orthopaedic Surgery Practice) Certificate of Consent

Appendix F

Permission to conduct a research study at Hospital X Permission Letter

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Appendix A

Definitions of hope's relation to the integrative hope theory (Scioli et al., 2011)

Author	Definition	Integrative understanding of hope (Scioli et al., 2011)
Lynch (1965) in Raleigh (2012, p. 441)	"The very heart and centre of a human being. It is the best resource of man, always there on the inside, making everything possible when he is in action, or waiting to be illuminated when he is ill"	Spiritual, based on the beliefs of man.
Stotland (1969, p. 2)	"Hope is an expectation greater than zero of achieving a goal. The degree of hopefulness is the level of this expectation or the person's probability of achieving a goal."	Unidimensional, directed towards mastery.
Melges and Bowlby (1969) in Raleigh (2012, p. 441)	"hope and hopelessness reflect a person's estimate of the probability of his achieving certain goals".	Unidimensional, directed towards mastery. Also aligned with estimative hope (Webb, 2007).
Miller (1983) in Raleigh (2012, p. 448)	"A complex multidimensional construct more than goal attainment; it encompasses a state of being. It involves a confident expectation of an on-going good state or liberation from a difficult situation".	Multidimensional, mastery, spiritual, survival motive.
Dufault and Martocchio (1985, p. 380)	"A multidimensional dynamic life force characterized by a confident yet uncertain expectation of achieving a future good which, to the hoping person, is realistically possible and personally significant".	Multidimensional, spiritual, mastery.
Snyder, Irving, et al. (1991, p. 287) in Snyder (2000b)	"A positive emotional state that is based on an interactively derived sense of successful agency and pathways".	Unidimensional, directed towards mastery.
Snyder, Harris, et al. (1991, p. 570)	"A cognitive set that is composed of a reciprocally-derived sense of successful agency and pathways".	Unidimensional, directed towards mastery.
Stephenson (1991, p.1459)	"A process of anticipation that involves the interaction of thinking, acting, feeling and relating, and is directed toward a future fulfilment that is personally meaningful".	Multidimensional, includes the spiritual, mastery and attachment channels.
Farran et al. (1995, p. 6)	"Hope constitutes an essential experience of the human condition. It functions as a way of feeling, a way of thinking, a way of behaving, and a way (of) relating to oneself and one's world. Hope has the ability to be fluid in its expectations, and in the event that the desired object or outcome does not occur, hope can still be present".	Multidimensional, addresses the attachment, mastery, survival and spiritual channels.
Groopman (2005, p. 199)	"The ballast that keeps us steady, that recognizes where along the path are the dangers and pitfalls that can throw us off; hope tempers fear so we can recognize dangers and bypass or endure them".	Multidimensional, mastery and survival oriented. Strong biological foundation of hope.



Groopman (2005, p. 170)	"Beliefs and expectation, cardinal components of hope, can block pain by releasing the brain's endorphins and encephalin, thereby mimicking the effects of morphine".	
Jevne (2005, p. 267)	"A small voice in the heart of each of us that yearns to say "yes" to life. If nurtured and strengthened it invites, encourages, pulls, pushes, cajoles and seduces us to go forward".	Multidimensional, includes a spiritual, survival, mastery and attachment component.
Duggleby et al. (2010)	"As transitional dynamic possibilities within uncertainty".	Multidimensional, mastery and spiritual.
Scioli and Biller (2010, p. 53) Scioli et al. (2011, p. 79)	"A future-directed, four-channel emotion network constructed from biological, psychological, and social resources. The four channels are the mastery, attachment, survival, and spiritual systems, or sub networks".	Multidimensional: Describe and include of all the channels of hope development.
Egan (2014, p. 225)	"A positive outcome expectancy bias".	Unidimensional, directed towards mastery.



Appendix B

Schedule of the semistructured interview

Emphasise that the aim of this interview / focus group will be to reflect on the received psychological intervention during the process of TKR.

- 1. How did you experience the hope intervention?
- 2. In what way did the hope intervention influence the challenges you faced during your surgery (or not)?
- 3. How did the intervention help you to set goals during your surgery (or not)?
- 4. What goals did you set for yourself?
- 5. How did the intervention motivate your efforts towards setting goals (or not)?
- 6. What resources inside or outside yourself did you use to get through your surgery?
- 7. How helpful (or not) was it to talk to a therapist during your surgery?
- 8. Did you benefit from the intervention? In what ways?
- 9. What about the intervention worked for you?
- 10. How could we improve the intervention?
- 11. What meaning or value did you get from this intervention?
- 12. Do you think hope intervention is necessary? Please explain why / why not.
- 13. Did the intervention help you to cope with surgery? How did it help you or not?
- 14. What is hope for you? How do you view hope?
- 15. What threatened your hopefulness during the TKR process?
- 16. Is there anything you would like to add to what we have discussed, that might be helpful in understanding your experience?



Appendix C

Full electronic version of the research interviews made available electronically



Appendix D



RESEARCH INFORMATION DOCUMENT (RID) AND INFORMED CONSENT FORM (ICF)⁵ (PATIENT PARTICIPANT)

A research study of the University of Pretoria

<u>Title of the study</u>: Total knee replacement patient's experiences of a brief hopebased in-hospital intervention

Dear Knee Surgery Patient/Participant⁶

This ICF is for men and women who are patients at the orthopaedic surgery practice of Dr C who are scheduled to undergo total knee replacement surgery. The form has two parts: firstly, an information sheet describing the research and secondly, a certificate of consent (for your signature if you agree to take part). You will be given a copy of the full ICF.

PART I: Information Sheet

Introduction and aim of the study

I, Alfred du Plessis, would hereby like to invite you to participate in a research study entitled *"Total knee replacement patient's experiences of a brief hope-based in-hospital intervention"*. I will conduct this research in my capacity as a doctoral (PhD) student in the University of Pretoria's, Faculty of Education, Department of Educational Psychology. The study forms part of the academic requirements for my doctoral degree in educational psychology. My supervisor is Dr Suzanne Bester.

The need for total knee replacement (TKR) surgical procedures have increased greatly during the past 10 to 20 years and will most likely continue to do so into the next decade. The psychological impact of this type of surgery is widely recognised as is the value of psychological intervention. This research study explores your experiences of one such intervention known as hope intervention. This type of interventions have been used in other contexts with positive outcomes, yet it remains under explored in the context of TKR.

Kindly read this letter carefully before you decide whether to participate, or not, in this research. You do not have to decide immediately. If you have any questions, feel free to contact me or my study supervisor, Dr Suzanne Bester.

⁵ This informed consent form was adapted from a template created by the Research Ethics Review Committee of the World Health Organization (WHO ERC) (<u>http://www.who.int/rpc/research_ethics</u>).

⁶ The terms patient/participant will be used interchangeably in this letter. This is done to clarify the role of the patient and the participant in this study at various stages.



The hope intervention

As a patient of Dr C you are offered the opportunity to receive hope intervention as part of the treatment plan when undergoing TKR. The hope intervention will consist of four sessions of 20 to 60 minutes each. During the pre-operational phase of the intervention, be watching a therapeutic DVD and meet with the therapist, Mrs E, who will listen closely to your personal experiences and wishes. Mrs E will explain the psycho-educational principles that may enhance your hope during the TKR process.

The intervention focus during the post-operational phase will be on promoting hope through psychoeducation and effective goal setting. Mrs E will also assist you in identifying barriers in achieving your goals and in finding effective ways to overcome the barriers. Follow-up sessions will be aimed at exploring motivational strategies for achieving your goals and will be supportive of hope development.

Previous research clearly indicates the value of psychological hope intervention as an advantage in patient recovery after major surgery and this study will potentially build on such research.

Participant selection

Adult TKR patients in Dr C's orthopaedic surgery practice will be invited to take part in the research study. Participants will be selected based on their decision in receiving the hope intervention, which will consist of pre- and post-operative hope intervention. The following participants will be excluded from the research process:

- Participants with a history of any co-morbid debilitating or life-threatening health problems (these should be brought to the researcher's attention).
- Participants who experience serious surgical complications that may compromise the planned intervention.
- Participants under treatment for/or who develop a diagnosable psychiatric disorder thus placing them in need of an alternative type of psychological intervention.

Your participation in this research is voluntary. Whether you choose to participate or not, you will still have the option to receive the treatment that is routinely offered in this hospital for TKR patients. You may also change your mind later and discontinue participation at any stage.

The various role-players in the research

The following role-players will be directly or indirectly involved in this study:

- The knee replacement patient/participant.
- The therapist (Mrs E).
- The researcher (Mr Alfred du Plessis).
- Dr C the orthopaedic surgeon.

The roles of the various role players are discussed below.



The role of the patient participant

As member of the treatment group you will be expected to be involved in the therapeutic process with the therapist as well as with the research process with the researcher. The two processes are described below:

• The intervention process

As TKR patients you will receive four in-hospital intervention sessions with Mrs. E that will range between 20 and 60 minutes each. The first of these sessions will be held prior to the operation. During these sessions, special consideration will be given to physical as well as emotional comfort of the patients to ensure that they are not exhausted. In these sessions, Mrs E will follow a psychoeducational hope intervention strategy aimed at supporting the patients throughout their in-hospital surgical experience. The intervention process will be in the following format:

- Session 1 Patient hope will firstly be explored through a scale measure called the Herth Hope Index (HHI). The scale should not take longer than five minutes to complete. The session will further be used to become acquainted with the patient and exploration of the patient's history. During this session the therapist (psychologist) will discuss the patients past experiences, the circumstances that led to the decision for surgery and the patient's expectations regarding the TKR process. Psychoeducational material will be used to guide patients towards hopeful thinking.
- Session 2 This is a psychoeducational and debriefing session after discharge from the High Care or Intensive Care unit.
- Session 3 Aimed at providing emotional support and addressing hope resources and experienced barriers to hope.
- ✓ **Session 4** Monitoring progress and reflecting on the intervention.
- The research process will be conducted in the following format by Mr du Plessis:
 - One semi-structured interview will be held with each participant approximately one month after surgery. This interview will, where possible, be arranged to coincide with the date of the participant's check-up by the orthopaedic surgeon. The interview will last approximately 60 minutes and will take place in the rooms of the orthopaedic surgery practice.
 - ✓ The participants will be given in-hospital diaries to record their emotional and physical experiences during the in-hospital surgical process and specifically after every intervention session (This can also be done as a reflection afterwards if the patient feels physically or mentally incapable of doing so in the hospital).
 - ✓ Throughout the research process, Mr du Plessis will keep an observational notes and a reflective diary during the data collection that will be used later for document analysis.
 - ✓ The participants will be asked to take part in a focus group discussion approximately three months after their discharge from hospital. This discussion will, if possible, be arranged to coincide with the date of their check-up by the orthopaedic surgeon and will take place in the orthopaedic surgery rooms. The focus group discussion will last approximately 60 minutes.
 - ✓ All semi-structured interviews and focus group discussions will be audio-recorded as a means of increasing the reliability of the collected data. The interviews will be



transcribed and made available to the participants during a process of member checking after completion of the research.

The role of the therapist – Mrs E

Mrs E, a registered educational psychologist with the HPCSA (Registration number: xxxxxx) will be the therapist during the hope intervention. Mrs E will only act as the therapist and her primary goal will be to render a professional service to the TKR patients.

She will be interviewed by the researcher after the interventions with patients have been completed. The interview will focus only on her experiences as therapist regarding the utility of the hope intervention from a therapist's point of view. No confidential or clinical information of patients she consulted with will be disclosed during the interview and only information pertaining to the utility of the intervention will be solicited from her.

Your rights as a recipient of mental health services will take precedence and your therapeutic relationship and progress will be the primary concern of Mrs E. Should any conflict arise between the therapeutic process and the research process preference will be given to the therapeutic process. Your relationship with Mrs E will therefore be completely confidential and she will adhere to the Code of Conduct of the Professional Board of Psychology at all times. No therapeutic notes or content that you share with her during the intervention that falls outside of the research data collection with Mrs E will be used in the research process.

The role of the researcher during the data collection phase - Mr Alfred du Plessis

Mr du Plessis will be involved in the research process in the following ways:

- Mr du Plessis will meet with each participant prior or the intervention to explain the research process to the participants and to complete the informed consent process.
- Mr du Plessis will conduct one semi-structured interview with each participant approximately one month after surgery. This interview will, where possible, be arranged to coincide with the date of the patient's check-up by the orthopaedic surgeon. The interview will last approximately 60 minutes and will take place in the rooms of the orthopaedic surgery practice.
- Mr du Plessis will provide the participants with research diaries to record their emotional and physical experiences during the in-hospital surgical process and specifically after receiving the intervention (This can also be done as a reflection afterwards if the patient feels physically or mentally incapable of doing so in the hospital).
- Mr du Plessis will interview the surgeon regarding the utility of the intervention for his patients one month after surgery.
- Mr du Plessis will keep a reflective journal on the entire research process.
- Mr du Plessis will facilitate the focus group discussion approximately three months after patients were discharge from hospital. This discussion will, if possible, be arranged to coincide with the date of their check-up by the orthopaedic surgeon and will take place in the orthopaedic surgery rooms. The focus group discussion will last approximately 60 minutes.
- Mr du Plessis will make audio-recordings of all the semi-structured interviews and focus group discussions will be audio-recorded as a means of increasing the reliability of the



collected data. The interviews will be transcribed and made available to the participants during the process of member checking after completion of the research.

The role of the orthopaedic surgeon

Dr C might be interviewed to explore his experiences of the utility of the hope intervention for his patients.

Duration

The research process is scheduled to be completed roughly 90 days after your discharge form hospital. Apart from the hospitalisation period during the surgical process, you will be required to visit the orthopaedic practise on two days for 60 to 90 minutes each day. This accounts for the interview and focus group interview with Mr du Plessis as mentioned earlier (approximately taking place one and three months after surgery respectively).

Risks and discomfort involved

Participants may be at risk of experiencing some emotional responses to the therapy. Patients might wish to withdraw from the study due to post-surgical factors such as fatigue and depressed mood often associated with surgical procedures such as TKR. In such a case patients will be provided with the necessary support and allowed to exercise their right to withdraw for research if need be. Continued therapeutic options will be discussed in the event that a patient experiences any adverse emotional response to the intervention.

Benefits of the study

Indications from related research highlights that the intervention can potentially benefit participants in that they may experience enhanced hope, emotional coping and recovery from surgery.

Rights of participants

Participation in this study is voluntary, and the participants may refuse to take part in it or exit at any time without giving any reason. If you decide not to participate or wish to discontinue your participation in the research component after you initially agreed, this will not affect your treatment in any way.

Participants will also be entitled to receive feedback on the research findings through a process of member checking. This will happen before the publication of the findings, which will take the form of a doctoral thesis and a research article in a scientific journal.

Confidentiality

Where possible the intervention sessions and the interviews will be conducted in a private room that is situated in the hospital and access to this venue will only be given to hospital or surgical staff in providing essential medical care if need be. This has specifically been arranged with the referring orthopaedic surgeon. Further to this, only the orthopaedic surgeon will know about the nature of the interventions that will take place and the subsequent interviews.



Identifying details will be kept confidential. Information that the participants disclose during intervention or research interviews will be confidential and will only be discussed with the research supervisor. No information will be disclosed or published without the permission of the participants. The therapeutic information that emerges during the interventions will be subject to the same rules of confidentiality that applies to the therapist-client relationship as determined by the Code of Conduct for psychologists.

Pseudonyms will be used for the participating hospital, surgical practice (surgeons), therapist and patients/participants. Any identifying details will be removed from the research documentation. During the process of member checking the researcher will not only confirm the research findings but also confirm with participants that they feel comfortable with the way in which their identities have been protected in the research report.

Sharing the results

Only after verifying the data results with the participants (member checking) will the results be published and then only in a way that protects the identities of the participants.

Alternatives to participating

If you do not wish to take part in the research, you will receive the standard treatment available at the hospital for patients undergoing TKR. This treatment includes in-hospital psychological services should there be a need for them (as allowed through your medical plan option).

Questions and information

The TKR patients will be free to ask any questions about the study and to take their time before deciding whether or not to participate in the study. Questions can be directed to:

Mr. Alfred du Plessis (Researcher) Tel: 012 420 5503 / Cell: 083 288 8442 or Dr. Suzanne Bester (Research supervisor) Tel: 012 420 3891

Ethical clearance

This research study has been approved by the Ethics in Research Committee of the University of Pretoria's Faculty of Education and Faculty of Health Sciences (Reference number EP14/03/02).

Thank you for considering this request for your participation in the study.

Yours sincerely,

Alfred du Plessis Researcher Dr. S. Bester Supervisor



PART II: Certificate of Consent

I, ______ (your name), have read the foregoing information-sheet, or its content has been conveyed to me. I have had the opportunity to ask questions about it and my questions have been answered to my satisfaction. I am further aware that the study researcher subscribes to the following principles.

- Voluntary participation, meaning that the participants may, at any stage, without prejudice, withdraw from the study.
- Informed consent, meaning that the participants will at all times be fully informed about the research process and purposes, and must have consented to their participation in the study.
- Safety in participation, meaning that the participants will not in any way be placed at risk or harm as a result of the research.
- Privacy, meaning that confidentiality and anonymity of the human respondents should be protected at all times.
- Trust, meaning that the participants will not be exposed to any acts of deception or betrayal in the research process or its published outcomes.

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

This signed at	on this	day of	2014.		
Print name of official					
Signature of official					
Print name of witness					
Signature of witness					
(A copy of this ICF has been provided to the participant)					
Signature of researcher					



Appendix D



CONSENT BY ORTHOPAEDIC SURGERY PRACTICE FOR PARTICIPATION IN RESEARCH STUDY (ORTHOPAEDIC SURGERY PRACTICE)

A research study of the University of Pretoria

Project title: Total knee replacement patients' experiences of a brief hope-based inhospital intervention

Dear Dr C

Introduction and invitation to participate

I, Alfred du Plessis, would hereby like to invite you to participate in a research study entitled *"Total knee replacement patients' experiences of a brief hope-based in-hospital intervention".* Please refer to the attached research information document (RID) for a comprehensive explanation of the research study.

The study accordingly aims to investigate the patient experiences of a hope-based psychological intervention during the process of TKR. I will conduct this research in my capacity as a doctoral (PhD) student in the University of Pretoria's Faculty of Education (Department of Educational Psychology). It will constitute part of the academic requirements for my doctoral degree in educational psychology.

This letter serves to inform you about the details of this study through the attached RID and to request your consent for participation in this research. Before making a decision you are entitled to be briefed by myself about the research and to direct questions to me in this regard. Should you wish to first discuss it within the context of your practice or with others, you are welcome to do so before consenting to the research. If you have any questions, feel free to contact me or my study supervisor, Dr. Suzanne Bester.

Your direct participation in the project

Should your practice partake in this project, your assistance will be needed in:

- (a) Sourcing patients for recruitment as participants for the research by identify patients who are willing to be contacted by the researcher as potential research participants.
- (b) Providing an interview room for the data collection.
- (c) You will be consulted during a brief semi-structured interview (approximately 20-60 minutes) to comment on the specific participating patients' observed overall progress after having received goal-directed intervention.

Thank you for your kind consideration of this request for participation.

Yours sincerely,

Alfred du Plessis Researcher Dr. S. Bester Supervisor



Certificate of Consent

I, ______ (your name), have read the foregoing information-sheet, or its content has been conveyed to me. I have had the opportunity to ask questions about it and my questions have been answered to my satisfaction. I am further aware that the study researcher subscribes to the following principles.

- Voluntary participation, meaning that the participants may, at any stage, without prejudice, withdraw from the study.
- Informed consent, meaning that the participants will at all times be fully informed about the research process and purposes, and must have consented to their participation in the study.
- Safety in participation, meaning that the participants will not in any way be placed at risk or harm as a result of the research.
- Privacy, meaning that confidentiality and anonymity of the human respondents should be protected at all times.
- Trust, meaning that the participants will not be exposed to any acts of deception or betrayal in the research process or its published outcomes.

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

This signed at	on this day of	2014.
Print name of official		
Signature of official		
Print name of witness		
Signature of witness		
(A copy of this ICF has be	een provided to the participant) RID	
Signature of researcher		



Appendix F



PERMISSION TO CONDUCT A RESEARCH STUDY AT HOSPITAL X

A research study of the University of Pretoria

Title of the study: Total knee replacement patients' experiences of a brief hopebased in-hospital intervention

The Chairman of the Board Hospital X By Hand

REQUEST TO CONDUCT IN-HOSPITAL RESEARCH

Introduction and invitation to participate

I, Alfred du Plessis, hereby request permission from the Hospital X to conduct a research study entitled "*Total knee replacement patients*' *experiences of I-HOPE*" in collaboration with Dr C's practice situated at your hospital.

The study will investigate the patient experiences of a hope-based psychological intervention during the process of TKR. I will conduct this research in my capacity as a doctoral (PhD) student in the University of Pretoria's Faculty of Education (Department of Educational Psychology) in fulfilment of the academic requirements for my doctoral degree in educational psychology.

The research process will not cause any disruptions to the normal functioning of the hospital or staff and will take place primarily at the in-hospital practice of Dr C.

Please refer to the attached research information document (RID) and informed consent form (ICF) for a comprehensive explanation of the research study.

Thank you for your kind consideration of this request.

Yours sincerely,

Alfred du Plessis Researcher Dr. S. Bester Research Supervisor



Permission letter

l,	_ (your	name),	have	read the	foregoing
information-sheet and hereby give permission on I	behalf d	of Hospital	X Boa	ard that the	e research
study "Total knee replacement patients' experie	ences d	of a brief	hope-	based	in-hospital
intervention" may be conducted at Hospital X.					

This signed at		on this	day of	2014
on behalf of the Hospita	l Board.			
Print name of official				
Signature of official				
Print name of witness				
T fint fiame of withess				
Signature of witness				
(A copy of this RID and	ICF has been prov	ided to the Hosp	ital Board)	
Signature of researcher				