

**RESILIENCY IN FAMILIES WITH A MOTHER DIAGNOSED WITH BREAST  
CANCER**

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## **Declaration**

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe on any third-party rights and that I have not previously, in its entirety or in part, submitted it for obtaining any qualification.

## ABSTRACT

This study aimed to identify resources, characteristics and factors that assisted families in the adjustment and adaptation to the chronic illness of breast cancer. Breast cancer is a growing global public health-care issue and one of the leading causes of death among women worldwide. A breast cancer diagnosis entails a demanding chronic illness for the ill individual, and is psychologically, emotionally and financially draining for family members, especially for those from a lower socioeconomic population. Given these challenges, a mother diagnosed with breast cancer is considered a family crisis. Nevertheless, some families are resilient in the face of adversity and are able to emerge strengthened and better equipped to overcoming the challenges an illness produces. This study and its findings add to knowledge and fill the large gap that exists in family resilience research and cancer literature.

The Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996), combined with Walsh's (2012) Family Resilience Framework, was used as theoretical foundation for this study to identify resilience resources associated with family adaptation. Both theories are situated within the realm of positive psychology (Antonovsky, 1996). Existing family resilience research after a breast cancer diagnosis is extremely scarce and a limited topic in the South African and worldwide context. A mixed-method convergent parallel research design was employed in this study. Non-probability convenience sampling was utilised to recruit 104 mothers, as representatives of their family, from the Breast Clinic at Tygerberg Hospital in Cape Town. The qualitative component included 11 semi-structured interviews that were conducted with the participants at the Breast Clinic. The qualitative data was analysed according to Braun and Clarke's (2013) thematic analysis method. It was implemented to identify themes and subthemes associated with family adaptation. The quantitative component encompassed the completion of seven self-report questionnaires. The quantitative data was analysed using Pearson's product-moment correlation coefficients and an analysis of variance (ANOVA), and a best-subset regression analysis was done to determine the independent variables that best predict family adaptation.

The combined qualitative and quantitative results give an in-depth understanding of the resilience factors and characteristics that assisted families to adjust and adapt following a breast cancer diagnosis. The results revealed the following family resilience characteristics: acceptance, hope and optimism, positive reframing, affirmative communication patterns, minimising reactivity towards stressor events, religion and faith in God, family time that

promotes togetherness, couple time together, family hardiness, social support from friends and family, community support and religious support. Finally, the importance of managing the breast cancer illness through the effective management of the side effects of cancer treatments came to the fore. The above-mentioned findings can be utilised by medical professionals, psychologists and medical personnel in breast clinics for early interventions for families that face the crisis of a newly diagnosed mother. This study is exploratory in nature and recommendations for future inquiries are provided.

Key words: Breast cancer, family resilience, family resilience and breast cancer, the Resiliency Model of Family Stress, Adjustment, and Adaptation, Walsh's Resilience Framework

## OPSOMMING

Hierdie studie se doel was om hulpbronne, eienskappe en faktore te identifiseer wat families gehelp het om aan te pas by die chroniese siekte van borskanker. Borskanker is 'n groeiende, wêreldwye gesondheidsorgprobleem en een van die vernaamste oorsake van dood onder vroue wêreldwyd. Die diagnose van borskanker lei tot 'n veeleisende, chroniese siekte wat sielkundig, emosioneel en finansiële dreinerend vir familieledes is, veral vir diegene van 'n laer sosio-ekonomiese bevolking. Gegewe hierdie uitdagings word die diagnosering van borskanker by 'n moeder as 'n krisis vir 'n familie beskou. Tog is sommige families veerkragtig wanneer hulle teenspoed in die gesig staar en is hulle in staat om sterker en beter toegerus te raak om die uitdagings wat 'n siekte veroorsaak, te oorkom. Hierdie studie en sy bevindinge dra kennis by en vul die groot gaping wat bestaan in navorsing oor veerkragtigheid in families en literatuur oor kanker.

Die *Resiliency Model of Family Stress, Adjustment and Adaptation* (McCubbin & McCubbin, 1996), gekombineer met Walsh (2012) se *Family Resilience Framework*, is gebruik as teoretiese grondslag vir hierdie studie ten einde die hulpbronne vir veerkragtigheid wat verband hou met aanpassings in families te identifiseer. Albei teorieë lê binne die gebied van positiewe sielkunde (Antonovsky, 1996). Bestaande navorsing oor die veerkragtigheid van families ná 'n borskankerdiagnose is uiters skaars en 'n beperkte onderwerp in die Suid-Afrikaanse en wêreldwye konteks. 'n Gemengde-metode konvergente parallelle navorsingsontwerp is in hierdie studie gebruik. Nie-waarskynlikheid gerieflikheidssteekproefneming is gebruik om 104 moeders, as verteenwoordigers van hulle families, van die Borskliniek by die Tygerberg-hospitaal in Kaapstad te werf. Die kwalitatiewe komponent het 11 semi-gestruktureerde onderhoude ingesluit wat met die deelnemers by die Borskliniek gevoer is. Die kwalitatiewe data is geanaliseer volgens Braun en Clarke (2013) se tematiese-analise metode. Dit is geïmplementeer om temas en sub-temas wat verband hou met familie-aanpassing te identifiseer. Die kwantitatiewe komponent het die voltooiing van sewe selfbeskrywingsvraelyste ingesluit. Die kwantitatiewe data is met behulp van Pearson se produkmoment-korrelasiekoëffisiënte en 'n variansieontleding (ANOVA) geanaliseer en 'n beste-substel regressieontleding is gedoen om die onafhanklike veranderlikes te bepaal wat aanpassings binne families die beste voorspel.

Die gekombineerde kwalitatiewe en kwantitatiewe resultate verleen 'n in-diepte begrip van die veerkragtigheidsfaktore en eienskappe wat families gehelp het om aan te pas ná 'n

borskankerdiagnose. Die resultate het die volgende veerkragtigheidsienskappe in families onthul: aanvaarding, hoop en optimisme, positiewe herberaming, bevestigende kommunikasiepatrone, die minimalisering van reaktiwiteit teenoor stressor-gebeurtenisse, godsdiens en geloof in God, familietyd wat samesyn bevorder, paartjies wat saam tyd spandeer, gesinsgehardheid, sosiale ondersteuning van vriende en familie, gemeenskapsondersteuning en godsdienstige ondersteuning. Ten slotte het die belangrikheid van die bestuur van die borskankersiekte deur die effektiewe bestuur van die nuwe-effekte van kankerbehandelings na vore gekom. Bogenoemde bevindings kan deur mediese beroepslui, sielkundiges en mediese personeel in borsklinieke gebruik word vir vroeë ingrypings vir families wat die krisis van 'n pas-geïdiagnoseerde moeder in die gesig staar. Hierdie studie is verkennend van aard en aanbevelings vir toekomstige ondersoeke word voorsien.

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## CHAPTER 1

### INTRODUCTION TO, MOTIVATION FOR AND AIMS OF THIS STUDY

#### 1.1 Preview

This chapter is the introduction to the current study, titled “resiliency in families with a mother diagnosed with breast cancer”. The chapter opens with important statistics on breast cancer in South Africa and worldwide. This is followed by a motivation for my study, in conjunction with the aims and problem statement. Definitions of the relevant medical constructs relating to breast cancer and the types of treatment modalities will be explained. This is followed by a discussion of the various ways breast cancer is considered a family crisis and how families are affected by the crisis. The chapter closes with an outline of the rest of the thesis to follow.

#### 1.2 Introduction

According to the World Health Organisation (WHO), cancer is a rising health-care issue in developed and developing countries (Apffelstaedt, Dalmayer, & Baatjes, 2014; WHO, 2016). Cancer is a leading cause of mortality and morbidity globally, with approximately 8.2 million cancer-related deaths in 2012. The WHO has predicted a major global increase of 17 million new cases of cancer by 2020, and of these new cases 70% will come from the developing world (Edge, Buccimazza, Cubasch, & Panieri, 2014; WHO, 2016).

Among all the cancer types, breast cancer is the most commonly diagnosed type of cancer and the leading cause of death among women globally (WHO, 2016). An estimated 1.67 million new cases of breast cancer were diagnosed worldwide in 2012 (Sestak & Cuzick, 2015). It is the second most common cause of death in the United States of America (USA), exceeded only by heart diseases (Siegel, Ma, Zou, & Jemal, 2014). One in eight women is affected by breast cancer, with 40 000 estimated deaths due to the disease in the USA in 2014 (American Cancer Society, 2015).

Likewise, breast cancer is considered a major public health problem in South Africa (Apffelstaedt et al., 2014). The public relies on reports from the National Cancer Registry (NCR), as it is currently South Africa’s main source of cancer statistics. The NCR collates and analyses cancer cases diagnosed across the country in both private and public hospitals

(CANSA, 2017b). The national cancer registry is not being updated regularly (CANSA, 2017b). Even though there is a lack of updated statistics, it is known that one in 35 women has a lifetime risk of breast cancer, which affects women of all races. It is the leading female cancer in South Africa, where a total number of 6 137 new cases of breast cancer were reported in 2010 (Apffelstaedt et al., 2014; CANSA, 2017b). In the Western Cape province of South Africa, the largest cancer-related disease in women is the diagnosis of breast cancer (Apffelstaedt et al., 2014). The incidence of cancer increases as the life expectancy of individuals living in developing countries increases (Edge et al., 2014).

Due to the increased rate of breast cancer in South Africa, it is essential to know how families with a mother diagnosed with breast cancer cope, survive and overcome the adversity of the illness. This led me to the question, “What resilience characteristics or factors are present in families with a mother diagnosed with breast cancer that help them to adjust and adapt to their circumstances and counteract the problems that impair family functioning?” This study aims to answer this question by exploring resilience resources characteristics and factors utilised by families with a mother diagnosed with breast cancer to overcome their adversity and adapt to the illness.

Breast cancer is considered a stressful, troublesome, upsetting and challenging illness and is referred to as a chronic illness in the medical world and throughout my current study (Love & Lindsey, 2010; Mellon, 2002; Radina & Armer, 2004). The reason breast cancer is referred to as a chronic illness is due to the risk of recurrence of cancer, which never fully disappears. Women who have breast cancer follow medical care for long periods of time from the early stages, and have frequent examinations by doctors for a number of years (Love & Lindsey, 2010). The screening for and stages of breast cancer is discussed in Section 1.5.3. The motivation for my study will be discussed in the next section.

### **1.3 Motivation for this study**

Chronic illness and disease are experienced in families globally. It is not a question of “if” families will experience these problems in their lifetime, but rather “when” they will occur (Walsh, 2012). Conditions that previously were considered fatal, such as AIDS, cancer and heart disease, are changing from that status due to advancements in medical technology advancements (Walsh, 2012). Now individuals are living much longer than ever before, and children who are living with chronic conditions are now reaching adulthood (Walsh, 2012).



Consequently, the number of families living with family members who have chronic illnesses or disorders is increasing over time.

For that reason, the longevity of older people comes with added strains for daughters and sons, who have to juggle the complexity of caregiving for aging parents, a demanding work life, a personal life and child rearing. Most of the time these families are often coping with other life pressures simultaneously (Walsh, 2012). Due to the increased burden on families who face a multitude of stressors, it is important to research resilience factors that strengthen healthy family functioning (Walsh, 2012).

There are a number of families who are resilient in the face of serious demands and are able to emerge strengthened and better equipped to overcome the challenges produced by a chronic illness like cancer (Walsh, 2012). When a serious illness occurs we need to move beyond outdated and narrow-minded ways for a family to cope, as we are advancing not only in the medical world, but also from past stereotypical ways of thinking about ‘the family’ and family life (Walsh, 2012). The understanding and general idea of ‘the family’ needs to broaden from the ill individual to the extended support networks of the family. The typical and narrow medical model of focusing on the ill individual needs to change to the successful coping of the family and that of their caregivers. For example, in this current study, families often live with cross-generational family members or non-family members. The “family” is regarded as a significant source of emotional and social support (Greeff & Thiel, 2012; Walsh, 2012). There is an increasing need to focus on and establish how families, as a unit, rise above and move beyond the effects of their mother diagnosed with breast cancer.

The current literature on breast cancer extensively discusses the quality of life of cancer survivors (the ill individual) and the dyadic relationships that exist between cancer survivors and significant others in their life (Mellon & Northouse, 2001). This aspect will be elaborated on in Chapter 3. Previous research on breast cancer has often overlooked the presence of resilience factors and focused on other aspects, such as patient coping styles, quality of life and other psychological and psychosocial concerns (Kershaw, Northouse, Kritpracha, Schafenacker, & Mood, 2004; Lim, 2014; Mellon, 2002). Furthermore, family relationships with breast cancer survivors have been researched comprehensively (Kim, Wellisch, Spillers, 2008; Trudel, Leduc, & Dumont, 2014). These relationships include dyadic relationships such as the physician-patient relationship and the mother-daughter relationship, or the spouse’s adjustment to the breast cancer diagnosis (Kim et al., 2008; Trudel et al., 2014). However, no

South African family resilience studies were found on families with a mother diagnosed with breast cancer. Resilience factors that reinforce healthy family functioning are useful to identify and provide aspects that can be utilised in intervention strategies to strengthen family systems. The development of resilience factors can be used to support breast cancer patients and their families during the traumatic and stressful time following the initial news of the diagnosis of cancer (Walsh, 2012).

In South Africa, there are an increasing number of studies that focus on resilience factors in families that have been faced with different types of adversities and crisis within the family system (Deist & Greeff, 2015; Greeff & Thiel, 2012; Greeff, Vansteenwegen, & Geldhof, 2014). On the other hand, there is only one other international study, to date, that discusses the adaption and adjustment of families with a mother diagnosed with breast cancer (Radina & Armer, 2005). These studies will be discussed in detail in Chapter 3. This current study aims to contribute to the literature of resilience in families with a mother diagnosed with breast cancer, as there is little to none information on this topic. The South African health-care system is burdened with limited resources, and often no information is available on factors that assist in family functioning, especially for families from poor socioeconomic backgrounds (Deist & Greeff, 2015).

As little is known on how the family unit adjusts and adapts to a mother's breast cancer diagnosis, the findings of this study can be used in numerous ways. They can be used to improve support structures and family interventions in hospitals and medical breast clinics for mothers who are newly diagnosed with breast cancer. Breast clinic nursing staff and medical doctors can be informed by providing accurate information on strengths, capabilities and qualities that focus on the adjustment and adaptation of the family in crisis after a breast cancer diagnosis. Information from this research could also be used by existing support groups for women with breast cancer and their families, such as Reach for Recovery or CANSA.

Health practitioners in medical or therapeutic settings can reduce the psychological risks and vulnerability of families by developing or enhancing the strengths identified in this study (Walsh, 2012). Instead of a family focusing on previous failures, or blaming the poor course of medical treatments, they can be supported during the difficult time of the diagnosis to focus on their family strengths. By doing so, Walsh (2012) suggests that the family may be better prepared to handle future challenges. In addition, the family may be encouraged by health

practitioners to create support systems within the family, which may assist them in overcoming crisis situations.

This study's findings on resilience factors and characteristics can be used to help normalise family members' experiences. When an illness strikes a family, their belief systems regarding 'health' and what they consider to be 'normal' are questioned, leading to them suddenly feeling vulnerable in the face of losing the fundamental trust and belief in their healthy functioning bodily system (Walsh, 2012). One of the fundamental processes of family resilience, according to Walsh's (2012) Resilience Framework, is the family's ability to make meaning of their adversity by considering their situation as a normal process. By viewing their situation in this manner, it reduces the tendency to blame and shame. The family's ability to create and consider a new outlook on their ill health is considered a key ingredient in assisting them during a crisis (Walsh, 2012).

Furthermore, the findings of this study can be used by health practitioners in clinical settings to facilitate support groups and to make contact with other families who are facing similar challenges in comparable situations (Walsh, 2003). This can help families make use of support from other families and assist in normalising their situation, as social support is one of the essential characteristics that contribute to resilience (Walsh, 2003). Social support will enable families to identify with one another (Walsh, 2003) and, moreover, to identify with resources used by other families in order to adjust to the crisis situation of having a mother diagnosed with breast cancer. Finally, maximising and strengthening family relationships and increasing hope will empower families and ultimately improve adaptive outcomes, and add currently unknown knowledge on resilience factors in women with breast cancer within a family context (Bowen, Morasca, & Meischke, 2003; Greeff & Thiel, 2012; Walsh, 2012; Wolf, 2014). The aims and objectives of my study will be discussed next.

#### **1.4 Aims and objectives of this study**

In the light of the above, the aim of this study was to explore, identify and describe resilience factors that are present in families where a mother has been diagnosed with breast cancer. This study sought to contribute to the knowledge on family resilience in dealing with breast cancer, targeting families as the unit of analysis and discovering how some families cope better than others. In addition, the findings will add to existing literature on family resilience in the South

African context. The following research question was formulated: “*What resilience qualities or factors are present in families with a mother diagnosed with breast cancer?*”

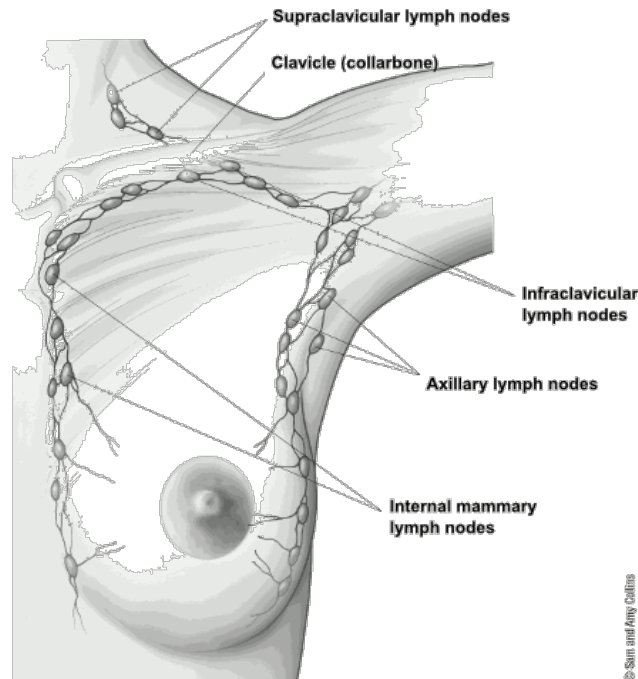
## **1.5 Conceptualisation of breast cancer and other relevant constructs**

It is important to understand the chronic illness to gain insight into the process a mother and her family go through when diagnosed with cancer. This section explains cancer, screening options and the different stages of breast cancer that affect women and possibly the family’s functioning. Cancer is a serious disease and family life changes drastically when a mother is diagnosed with breast cancer. Breast cancer is defined by the American Cancer Society (2017, p. 2) as:

...a malignant tumor that starts in the cells of the breast. A malignant tumor is a group of cancer cells that can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body. Most breast cancers are carcinomas, a type of cancer that starts in the cells (epithelial cells) that line organs and tissues like the breast.

### *1.5.1 The lymphatic system of the breast*

To understand breast cancer and the different stages of cancer, it is essential to understand the anatomy of the breast (see Figure 1.1). The breast is surrounded by lymph nodes. These are a small collection of bean-shaped immune system cells that are connected to lymph vessels. The lymph nodes are important for fighting infections in the body. Lymph nodes carry away waste products, tissue fluid and immune system cells in a clear fluid called lymph. Breast cancer can spread to the lymphatic vessels entering the lymph nodes. The lymphatic vessels in the breast are connected to lymph nodes, known as axillary lymph nodes, and these are located under the arm near the armpit. Some lymph nodes are connected to the chest, called internal mammary lymph nodes. If cancer spreads to the lymph nodes there is a big chance of breast cancer spreading to distant sites in the body, as it enters the bloodstream (American Cancer Society, 2017; Love & Lindsey, 2010). The risk factors of developing breast cancer, as well as the screening and stages of cancer, will be discussed in the subsequent section.



**Lymph nodes in relation to the breast**

*Figure 1.1.* Auxiliary lymph nodes in relation to the breast (adapted from American Cancer Society, 2017).

### *1.5.2 Risk factors for breast cancer*

The major risk factors for developing breast cancer are discussed briefly in this section. There are several risk factors associated with developing breast cancer. Firstly, women are automatically at a higher risk of developing breast cancer due to the hormonal makeup of the female body. In fact, breast cancer is 100 times more common in women than in men (American Cancer Society, 2017, CANSA 2017a). The risk of developing breast cancer increases with age. It commonly presents in women over the age of 40, and the incidence of breast cancer rises after each decade (Apffelstaedt et al., 2014; Matatiele & Van den Heever, 2008).

Secondly, risk factors for developing breast cancer are not affected only by age, but also by a family's genetic history of breast cancer. According to the American Cancer Society (2017), about 5% to 10% of breast cancer cases are thought to be hereditary. The risk for breast cancer is higher in women with close blood relatives with the disease. For example, if a woman has a

first-degree relative with breast cancer, such as a sister, daughter or mother, this doubles her risk of getting breast cancer. If she has two first-degree relatives with breast cancer, this triples her chances of the occurrence of the disease. The most common cause for hereditary breast cancer is the inherited gene mutation known as *BRCA1* and *BRCA2*. In normally functioning cells, these genes help prevent cancer. However, if a person has inherited a mutated copy of the gene from either parent she has a high risk of developing breast cancer during her lifetime (American Cancer Society, 2017). Thirdly, a woman's personal medical history of breast cancer, if she has already been diagnosed with the disease, leads to a much higher risk of developing cancer in different parts of her body. In addition, the chances of developing new cancer in the same breast, or developing cancer in her unaffected breast, are four-fold.

Fourthly, a woman's reproductive history from the moment she started her menstruation cycle is automatically a high-risk factor for the development of breast cancer. This is due to the lifelong exposure to the female hormones progesterone and oestrogen. A woman has a higher risk of the incidence of the disease if she started menstruating before the age of 12. In contrast, the use of hormone therapy to reduce menopausal symptoms is also considered a common risk factor for breast cancer (American Cancer Society, 2017; Love & Lindsey, 2010; WHO, 2016). Lastly, lifestyle choices, such as a poor diet, being obese or overweight, alcohol intake and smoking, are all suggested to be associated with an increased risk of breast cancer (American Cancer Society, 2017). The risk factors for developing breast cancer are numerous and are difficult to control for, although frequent screenings and tests for the disease may lower one's chances of developing the illness.

### *1.5.3 Screening for and stages of breast cancer*

A breast cancer diagnosis is regarded as an extremely stressful experience, and many people consider cancer to be a death sentence (Love & Lindsey, 2010). However, cancer treatment and screening have improved in the last 20 years (Greeff & Thiel, 2012; Love & Lindsey, 2010). Screening procedures for breast cancer include, firstly, a general physical examination by a doctor. If the doctor feels that breast cancer is possibly present, more screening tests of the breast will be conducted. Each patient receives a personalised treatment plan that is discussed by the patient and the doctor. This includes imaging tests such as mammograms, which is an X-ray of the breast. In the mammogram, the breast is pressed between two plates to flatten and spread the breast tissue. Otherwise an X-ray is taken by means of sonography, which is also known as an ultrasound. Lastly, screening can be done by means of magnetic

resonance imaging (MRI) scans. All of the above are used to detect abnormal lumps or growths (Love & Lindsey, 2010).

A biopsy is performed when the screening results of the mammogram, sonogram or MRI scan detect a possibly cancerous lump or abnormal area in the breast tissue. There are a number of different types of biopsies. Generally, for a biopsy, a sample of the cells in the possible cancerous area are removed and analysed under a microscope. The cancer is graded, and a lower grade number means slow-growing cancer, which is less likely to spread, while faster growing cancer will have a higher grade number and is more likely to spread. The stage of cancer and survival rate is then determined (Love & Lindsey, 2010).

There are four different stages of breast cancer. The stage describes the extent to which the cancer has spread. It is considered an important part of the diagnosis and an important factor regarding treatment options (Love & Lindsey, 2010). The different stages are discussed briefly below.

Stage I breast cancer is where the tumour is 2 cm or less and has the possibility of spreading to one to three axillary lymph nodes (see Figure 1.1). According to the American Cancer Association (2017), each stage determines the survival rate of the patient. In stage I a person has a 100% chance of survival.

Stage II breast cancer is where a tumour has been found between the size of 2 cm and 5 cm, has spread to one to three axillary lymph nodes (see Figure 1.1), and has not spread to distant sites of the body. The survival rate in stage II stands at 93% (American Cancer Society, 2017; Love & Lindsey, 2015).

Stage III breast cancer is where the tumour is larger than 5 cm. The cancer has spread to between one and nine axillary lymph nodes (see Figure 1.1) and/or the tumour has grown into the chest or skin. However, the cancer has not spread to distant sites of the body. In stage III, the patient has a 72% survival rate (American Cancer Society, 2017; Love & Lindsey, 2015).

In the earlier stages of cancer (stage I, stage II and stage III), the disease has not spread to distant parts of the body and is confined only to the breast area, whereas at the last stage, stage IV, the cancer can be any size and has spread to other organs – common areas are the lungs, brain, bone and liver. At stage IV, the patient has a survival rate of 22% (American Cancer

Association, 2014; Love & Lindsey, 2010). As breast cancer progresses in stage IV it may spread to other areas of the body. However, it is always named after the place where it started. For example, breast cancer that has spread to other surrounding organs, like the eyes, bone or liver, is still called breast cancer (American Cancer Society, 2017; Greeff & Thiel, 2012).

For the purpose of the sample included in this study, it is important to understand the survival rates of breast cancer. Stage IV breast cancer is regarded as the last stage and chances of survival are very rare. A family will need to come to terms with the possibility of the cancer patient not surviving the illness in stage IV, and the patient may enter palliative care. On the other hand, according to Doctor K Baatjes (personal communication, May 19, 2015), the head surgeon at the Tygerberg Academic Hospital Breast Clinic, stage I cancer has a 100% survival rate and is not regarded as traumatic and stressful as for those who have been diagnosed with stage II or stage III breast cancer. In addition, the cancer stages were limited to stages II and III for this study. Families with a member diagnosed with stages I or IV were excluded from this study to maintain a research focus on constructs of family resilience, where breast cancer can be considered as a chronic illness and a family crisis (see Section 1.6).

Therefore, only people with stage II and stage III breast cancer were included in the final sample for this study. As mentioned previously, treatment options and plans are often personalised for each individual patient, according to the severity of the cancer. The different treatment options available, in no specific order, are: (1) radiation, (2) surgery, (3) chemotherapy, (4) hormone therapy and (5) targeted therapy (American Cancer Society, 2017; Love & Lindsey, 2010). These different kinds of treatment modalities are discussed briefly below.

To create a treatment plan it is important to know the stage of development of the cancer. Each treatment plan is personalised to the individual's needs with a combination of different treatments. Furthermore, treatment varies according to the stage of the cancer and the age of the woman (Love & Lindsey, 2010). The different kinds of treatment modalities for the cancer diagnosis often include, in no specific order, the following:

(1) Radiation therapy: this comprises high-energy rays that destroy cancer cells to reduce the size of cancer before surgery, or it can reduce the chance of reoccurrence of the disease after surgery;



(2) Surgery: this entails either the removal of the entire breast (mastectomy) or only the cancerous lump in the breast (conservative). This is discussed between the patient and the physician, as the removal of a breast is a sensitive subject;

(3) Chemotherapy (before or after surgery): this is a cancer-killing drug that is administered intravenously (injected into a vein) or by mouth. The drug travels through the bloodstream and kills cancer cells. Chemotherapy is given in cycles and can last for a number of months. The drug has several side effects, including hair loss, mouth sores, nausea, vomiting and fatigue;

(4) Hormone therapy: this therapy is used to reduce the reoccurrence of breast cancer after surgery has taken place. The hormone oestrogen is believed to encourage the growth of cancerous cells that are hormone receptor-positive. The most widely administered drug is taken in the form of a pill by mouth – a pill called Tamoxifen; and

(5) Targeted therapy: in this case the cancerous cells contain too much of the growth-promoting protein known as HER2. Without special treatment for HER2, the breast cancer tends to grow more aggressively and spread faster. There are a number of drugs that have been developed to target this protein (American Cancer Association, 2016; Love & Lindsey, 2010).

For this study it was important to understand each phase of the cancer treatment, as each phase brings about its own stresses for a family with a mother diagnosed with breast cancer. Surgery and chemotherapy are considered the most trying of all the phases of treatment for both mothers and family members. Mothers may become extremely ill due to the side effects of the cancer treatment and are unable to fulfil their motherly roles for a period of time (Love & Lindsey, 2010). A mother who has been diagnosed with breast cancer can be considered to be in distress. This distress can be considered as a crisis within the family system. When a mother is diagnosed with breast cancer it is regarded as a family crisis, which will be discussed in the next section (Radina & Armer, 2004; Walsh, 2012).

## **1.6 Breast cancer as a family crisis**

After a cancer diagnosis, a mother may experience shock, depression, self-doubt and even anger (Love & Lindsey, 2010). She may have many questions going through her mind after a cancer diagnosis, such as what the stage of the cancer might be, what her options are for treatment, and thoughts of losing a breast or both breasts. All of these questions and thoughts

can be terrifying and confusing to deal with (Love & Lindsey, 2010). However, the time after the diagnosis is not only a personal experience, but rather an experience shared with close relatives and loved ones, such as the mother's immediate family, her spouse and child(ren) (Brown et al., 2007). A period of anxiety and insecurity may commence for the entire family as they face many future challenges after the diagnosis (Greeff et al., 2014).

It is frequently mentioned in the literature that women suffering from breast cancer often face ongoing emotional, physical, psychological, social and socio-economic burdens (Greeff & Thiel, 2012; Hoke, 2001; Love & Lindsey, 2010; Mellon & Northouse, 2001). Mothers may experience distress in terms of balancing their personal needs and the needs of their families. They might even question the need to disclose their illness to other relatives, family members and children younger than six or seven years old (Love & Lindsey, 2010). Researchers suggest that cancer may have a negative impact on families as they struggle to find harmony in coping with the illness and the demands of everyday life (Brown-Baatjies, Fouche, & Greeff, 2008; Campbell-Enns & Woodgate, 2013; Greeff et al., 2014; Hoke, 2001; Kim et al., 2008).

As previously mentioned (see Section 1.3), research on breast cancer and coping has often overlooked resilience qualities in the family as a unit of analysis (Kershaw et al., 2004; Lim, 2014; Mellon, 2002). For a family to overcome such a crisis it is understood that the family as a unit will need to adjust and adapt to the challenges that come with the cancer diagnosis, thus becoming resilient (McCubbin & McCubbin, 1996). Family roles may be changed and shifted among family members due to the mother of the family being unable to fulfil her normal motherly roles and functions. Sometimes these changes upset the normal family functioning and families may experience distress (Campbell-Enns & Woodgate, 2013). As a result it is useful to identify resilience factors that strengthen family functioning. Resilience factors can provide strategies and interventions for families with mothers who have been diagnosed with breast cancer. These interventions and strategies can assist breast cancer patients and their families during the stressful experience. Consequently, this study focuses on the resilience of families with a mother diagnosed with breast cancer.

## **1.7 Family resilience**

A family crisis and major stressors, such as having a mother diagnosed with breast cancer, can impair family functioning. However, the construct that encapsulates how families counteract situations of adversity and contribute to family well-being, personal growth and relationship

transformation is family resilience (Patterson, 2002; Walsh, 2003; 2012; 2016). Family resilience is defined by McCubbin and McCubbin (1996, p. 5) as:

...the positive behavioural patterns and functional competence individuals and the family unit demonstrate under stressful or adverse circumstances, which determine the family's ability to recover by maintaining its integrity as a unit while insuring, and where necessary restoring, the well-being of family members and the family unit as a whole.

This research integrated the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996) and the Family Resilience Framework (Walsh, 2003; 2012) as theoretical point of departure to identify and explore characteristics and factors that are associated with family adaptation. These family resilience theories and constructs will be discussed in detail in the subsequent chapter.

## **1.8 Conclusion**

The incidence of breast cancer is increasing globally, and in South Africa. The disease is considered a major public health problem worldwide. The relevant definitions of breast cancer and the workings of the lymphatic system are important to understand in order to view the disease as a family crisis. To understand how some families cope during a crisis situation, such as having a mother diagnosed with breast cancer, the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996) and Walsh's (2012) Resilience Framework were utilised to identify factors, characteristics and attributes that are associated with family adaptation after the mother's diagnosis.

South Africa's health-care system is extremely overburdened and there is a need for proactive, health-focused interventions in hospitals and clinics where there are limited resources (Deist & Greeff, 2015). In developing countries such as South Africa it is important to identify existing strengths and mechanisms in families that are easily available – whether these factors are in their immediate family, extended family or wider community – to help them overcome difficult periods, such as having a mother diagnosed with breast cancer.

## **1.9 Outline of this thesis**

The thesis is presented in the following way: in Chapter 2 a discussion of the theory underlining this research study is presented. This chapter outlines and explains in detail the evolution of family resilience theory and discusses the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996). Thereafter, the Family Resilience Framework, formulated by Walsh (2003; 2012), is discussed. When integrated, these two theories form the theoretical foundation of the current study.

Chapter 3 will discuss the available literature on breast cancer and coping. Although there is no other research on breast cancer that utilises the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996), there are other studies that made an attempt to understand the ill individual and family survivorship after a breast cancer diagnosis. Hence, the chapter will show how the literature posed the need for this research, which utilises a family system approach to breast cancer and family adaptation.

The research aims and the design of the study are described in Chapter 4. This is followed by an explanation of the sampling strategy, data collection measures, procedures and data analysis. The chapter closes with a consideration of the ethical aspects of the study.

In Chapter 5 both the quantitative and qualitative results of the study are reported. These results show possible resources, factors and attributes (according to the mother's perspective) that helped their family to adjust and adapt to the breast cancer diagnosis. The qualitative results that are reported are particularly interesting, as they add new aspects that either contradict or support the quantitative findings.

Chapter 6 presents the final discussion of the results and conclusions of the study. The chapter ends with the limitations of the study and recommendations as points of departure for future research.

## CHAPTER 2

### THEORETICAL CONCEPTUALISATION OF FAMILY RESILIENCE

#### 2.1 Introduction

This study utilised two theories in its conceptualisation, planning and execution. These two theories were used in conjunction with each other. The first is the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996), and the second is the Family Resilience Framework of Walsh (2012). This chapter begins with a discussion of the positive psychology paradigm, followed by a discussion of the shift that took place from individual resilience to family resilience. This is followed by a discussion of the evolution of the development of the Resiliency Model of Family Stress, Adjustment, and Adaptation. In order to show the relevance of the model to the current study, four models that preceded the Resiliency Model of Family Stress, Adjustment, and Adaptation will be explained. Thereafter the Family Resilience Framework (Walsh, 2012) will be discussed. The chapter closes with a discussion of the advantages of choosing the previously indicated theoretical frameworks as a foundation for this study.

#### 2.2 Positive psychology

Practice and research in the social and health sciences were characterised by a pathogenic orientation in the first half of the twentieth century (Strümpfer, 2013). However, since the second half of the twentieth century the research field has shifted from deficits and treatments to a focus on prevention and moved towards a strengths-based positive psychology approach (Strümpfer, 2013). Positive psychology is a paradigm that is based on the assumption that there is always an opportunity for hope where fear and suffering may be present (Lopez & Gallagher, 2009). Strengths-based approaches are located within the positive psychology paradigm (Hawley & DeHaan, 1996; Strümpfer, 2013). However, positive psychology does not have a sole focus on positive aspects and an optimistic view, but also encompasses both positive and negative aspects that surround an adverse circumstance or illness (Strümpfer, 2013). Nevertheless, even though both aspects are included in the paradigm, it should be noted that the emphasis is not on the negative factors, but rather on positive factors that are present despite the negatives. These positive factors assist in supporting an individual to cope with adversity.

Antonovsky (1979) was interested in how some individuals survive stressful circumstances whereas others dwindle in the face of adversity. Antonovsky, one of the many theorists in the field of positive psychology, conceptualised the term ‘salutogenesis’. Salutogenesis originates from the word ‘genesis’ (meaning origins) and ‘saluto’ (meaning health) (Antonovsky, 1979). The pathogenic orientation of the earlier twentieth century had a limited focus and a dichotomous way of viewing a person as being either in a state of illness or of well-being (Antonovsky, 1996). The salutogenesis approach offers a multifaceted way of viewing an individual on a continuum between illness and well-being. By viewing an individual in this way, it allows one to identify factors that push the individual to either end of the continuum. The salutogenic approach allows for the discovery of factors and characteristics that promote well-being (Antonovsky, 1996). Accordingly, salutogenesis is guided by the idea of survival. This survival is based on the individual’s ability to thrive, despite having an illness or going through stressful life events.

Salutogenesis utilises three dimensions: Firstly, it aims to find solutions for disease and stressful circumstance, hence is solution focused. Secondly, salutogenesis attempts to shift the focus from disease to the individual who is experiencing it. Lastly, it aims to place illness and health along a continuum on which they are not operating independently of one another (Antonovsky, 1979; Greeff, 2013; Strümpfer, 2013). Salutogenesis, as part of the positive psychology paradigm, offers a way of understanding both individual resilience and the resilience of the family as a unit.

Family resilience studies adopt this salutogenic approach by viewing the family system along a continuum from illness to well-being (Hawley & DeHaan, 1996). All families are subjected to potential family crises. From the perspective of the positive psychology paradigm, all families possess qualities to overcome adversity (Walsh, 2012). For example, a mother diagnosed with breast cancer poses a potential family crisis. Hawley and DeHaan (1996) discuss two factors that are important for understanding resilience. Firstly, resilience comes to the fore when hardship is experienced. Secondly, a resilient family aims to return to existing ways of functioning, attempting to “bounce back” and maintain a state of balance. As a result of a resilient perspective, families are viewed in terms of well-being, as well as other factors that assist them to adapt to stressors and increase the family’s functioning.

The salutogenic approach does not disregard crises, but rather looks at how the family can be moved towards greater health when faced with adversity (Antonovsky, 1996). The family unit

can utilise its resilience when experiencing a crisis. The next section expands on the concept of resilience.

### **2.3 Resilience**

To date, most research and theory have focused on individual resilience, originally observing resources and attributes that are present in individuals adapting to stressors such as illness and hardships (Greeff, 2013; Patterson, 2002; Walsh, 2003, 2016). Resilience was seen as being located within the individual and the focus was on those individuals who had mastered dealing with adversity. In addition, their strengths were identified as innate personality traits and thought of as a “biological hardiness” that was acquired through good fortune or resourcefulness (Walsh, 1996, 2003).

Early studies focused on destructive family environments in which individuals, as a result of their characteristic traits, were understood to be “invulnerable” and impervious to stress (Walsh, 1996, 2003). In other words, according to initial research on resilience, stressful circumstances did not affect individuals due to the personal traits that assisted them through the crisis. Families and parents were understood as contributing to risk, rather than being seen as contributing to resilience (Walsh, 2003, 2012). Walsh (1996) states that this has caused researchers to overlook the possibility of resilience in families as a functional unit.

Masten (2001) proposes that resilience is, in fact, a common phenomenon that usually arises from normative daily processes and structures. Within the understanding that individual resilience comes from ordinary processes, resilience offers a positive outlook on development and adaptation in individuals by recognising the family as a source of strength (Masten, 2001; Walsh, 2003).

There is a positive influence of family relationships with other family members on the individual in (Masten, 2001; Walsh, 2003). Researchers have been interested in understanding why some individuals function better than others facing a similar adversity. As a result, mental health theories shifted focus and moved towards adopting a salutogenic approach to understanding and conceptualising resilience (Patterson, 2002; Strümpfer, 2013).

Werner and Smith (2001) conducted an important longitudinal study in order to understand the resilience of children. These children had been exposed to a range of adverse life conditions.

Several of the children, as predicted by the study, became dysfunctional adults. Others showed resilience and formed significant relationships with family, teachers and intimate partners, who encouraged them (Walsh, 2003, 2016). Werner and Smith (2001) found that, from a family systems orientation and perspective, relationships between family members and the wider system benefited individual resilience.

A family resilience orientation places importance on the wider system that is outside the immediate family, which is included in an ecological perspective. This includes physical spheres such as churches, schools and neighbourhoods, and social spheres such as extended family and friends (Walsh, 2012). The ecological perspective is also regarded as significant along with the systemic view of family resilience. The family resilience approach recognises the broader spheres that influence family life, such as the economic, political and cultural spheres (Hawley & DeHaan, 1996; Walsh, 2003, 2012, 2016).

Over time, researchers found that both the larger sociocultural influences and the family played an important role in the development of family resilience. Resilience involved several risks and protective processes, and families are either considered a risk factor or protective factor in individual resilience (Hawley, 2000; Hawley & DeHaan, 1996; Walsh, 2003). However, from a systemic viewpoint, considerable research shows that adversity affects the family unit as a whole, and not only the individual members (Walsh, 2003). As a crisis in the family system can disrupt family functioning, it influences all family members and relationships.

Alternatively, when confronted with a crisis situation, family processes could facilitate the recovery of the family unit. Recovery factors enable the family to unite in times of crisis, consequently buffering the family against stress, reducing dysfunctional risks and ultimately supporting optimal family adaptation and functioning. Therefore, the notion that resilience can possibly be deemed a family-level construct, instead of restricting to being a resource for individual resilience, received increasing support from researchers (Hawley & DeHaan, 1996; Patterson, 2002; Walsh, 2003).

## **2.4 From individual resilience to family resilience**

Family resilience has been defined and theorised in numerous ways (Hawley & DeHaan, 1996; McCubbin & McCubbin, 1996; Patterson, 2002; Walsh, 1996, 2012). Walsh (2003, p. 1) defines resilience as a family's "... ability to withstand and rebound from disruptive life



challenges”. Furthermore, Walsh (1996, p. 263) defines family resilience as “key processes that enable families to cope more effectively and emerge harder from crises or persistent stresses, whether from within or from outside the family”, while Hawley and DeHaan (1996) describe family resilience as “the ability to bounce back” from adverse life conditions, or after a crisis (p. 6).

Hawley and DeHaan (1996) identified common nuances of family resilience. The authors describe family resilience as “the path a family follows as it adapts and prospers in the face of stress, both in the present and over time” (Hawley & DeHaan, 1996, p. 293). Black and Lobo (2008, p. 33) describe resilience as “the successful coping of families during life transitions, stress, or adversity”. Lastly, as previously mentioned in Chapter 1, family resilience has been defined by McCubbin and McCubbin (1996, p. 5) and is utilised in the present study as:

...the positive behavioural patterns and functional competence individuals and the family unit demonstrate under stressful or adverse circumstances, which determine the family’s ability to recover by maintaining its integrity as a unit while ensuring, and where necessary restoring, the well-being of family members and the family unit as a whole.

The above-mentioned definitions of family resilience highlight a number of essential characteristics. Firstly, the definitions suggest that resilience surfaces in the face of hardship and cannot exist without hardship. They propose that no family is exempt from crisis situations and that resilience encompasses the family’s response to the stressful life event. In addition, resilience is characterised by a family’s ability to maintain normal levels of functioning as they experience a crisis. Secondly, resilience is characterised by buoyancy. In other words, even if a family temporarily struggle under adverse conditions, a resilient family are able to return to previous ways of functioning, thus utilising factors that promote adaptability. Families that are considered resilient sometimes experience growth due to the adversity they have come across in their lives. This results in them not only rebounding from a crisis, but emerging as more competent in their family functioning and their dealing with future challenges (Black & Lobo, 2008; Hawley, 2000; Hawley & DeHaan, 1996; Walsh, 2003). Lastly, resilience is generally defined in terms of well-being and health promotion, rather than focusing on pathology and family shortfalls. Therefore, in resilience studies, the emphasis is on resources and strengths that families utilise to overcome adversity (Hawley & DeHaan, 1996; Walsh, 2012). According

to a family resilience view, no family is considered perfect, and the focus therefore shifted to how certain families can adapt to adverse conditions by making use of attributes and resources already existing in the family system (Patterson, 2002; Walsh 2012).

In the pursuit of better understanding the family resilience process, a number of theorists have made a considerable contribution to the advancement of the family resilience paradigm. For example, McCubbin and McCubbin (1996) formulated the Resiliency Model of Family Stress, Adjustment, and Adaptation, and Walsh (2002, 2012, 2016) formulated the Family Resilience Framework. These theories provide the theoretical foundation for the current study. A detailed description of these theories is discussed below, beginning with the evolution of the Resiliency Model of Family Stress, Adjustment, and Adaptation.

## **2.5 Evolution of the Resiliency Model of Family Stress, Adjustment, and Adaptation**

Family resilience theory developed over time and explains how some families are able to cope with hardship while others diminish when faced with similar circumstances or an identical adversity. Previous research exploring early resilience theories and frameworks revealed a number of limitations. This resulted in the motivation for the evolution of the model to its current form – the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996).

Throughout the years, four family resilience models were developed. The subsequent section discusses the evolution of the Resiliency Model of Family Stress, Adjustment, and Adaptation of McCubbin and McCubbin (1996), which was utilised in this study. The reason for this is that it has been used in various resilience studies to measure different family variables that are associated with family adaptation in crisis situations (Greeff, 2013). Further on in this study, this model will be referred to as the Resiliency Model.

### *2.5.1 Hill's ABCX Model*

The Resiliency Model developed from the early work of Reuben Hill, who proposed the ABCX Model in 1949. The development of the ABCX Model was the starting point for subsequent family resilience theories and research (Greeff, 2013; Hawley & DeHaan, 1996; McCubbin & McCubbin, 1996; Walsh, 1996). Hill's research focused on families after World War II who were faced with the challenges that war produces, such as separation of and reunion with loved

ones. Hill focused on the families and their efforts to cope. He studied family adjustment to the crisis of separation and reunion by recording the many different modes of adjustment. He discovered types of family organisation and adjustment processes that render a family most at risk or not at risk of the separation/reunion crisis.

Hill's ABCX Model introduced the idea that the stressor that leads to a crisis within a family is mediated by several variables. These mediating variables can protect a family who are going through a crisis situation. By providing a framework that focuses on family strengths, Hill's ABCX Model focused on pre-crisis factors. The ABCX Model can be explained in the following way: A is the event (or stressor) interacting with B, which is the family's resources in dealing with the stressor/crisis. C is the family's definition of the stressor, which is seen within the family itself in terms of the family's structure and values and which helps the family to recover from deteriorating in a crisis situation (factor X) (Becvar, 2012; Greeff, 2013; McCubbin & McCubbin, 1996).

The ABCX Model served as the foundation for understanding families in crisis, thus paving the way and laying the theoretical foundation for the development of future models (Becvar, 2012; Greeff, 2013).

### *2.5.2 The Double ABCX Model*

Hill's ABCX Model was followed by the Double ABCX Model, developed by McCubbin and Patterson. It improved on Hill's ABCX Model by redefining pre-crisis variables and adding four post-crisis aspects to the model (McCubbin & McCubbin, 1996). By adding four post-crisis aspects it assisted in understanding the complexity of resilience.

The first post-crisis aspect of the model focuses on families experiencing more than one single stressor. McCubbin and Patterson theorised that, in addition to a family crisis, families often have to deal with a pile up of co-occurring stressors and strains over time that may have a collective effect on the family. This is in contrast with the ABCX Model, which only focused on a single stressor before the crisis. The Double ABCX Model takes into account the past and future co-occurring normative and non-normative strains. The AA factor, representing the pile up of strains and the crisis situation, gives credence to analysing the normative and non-normative strains (Lavee, McCubbin, & Patterson, 1985; McCubbin & McCubbin, 1996).

Secondly, the Double ABCX Model considers the many coping resources that families may have available to them. In addition, coping resources can be created during a crisis situation. As a result, the BB factor, representing existing available resources for the family and new resources that are created, was incorporated into the model. Family resources and coping mechanisms include (1) family system resources, such as communication, cohesion and adaptability; (2) personal resources, such as the knowledge, skills and characteristics of individual family members; and (3) social support, for instance family connections and the community (McCubbin & McCubbin, 1996).

A third aspect that was added was the family's view of the crisis situation. This is called the CC factor. As the appraisal process involves continuous assessment of the situation and resources available to the family, family appraisal of the situation and its severity is a more complex process than can be understood through a simple definition. The CC factor assists in understanding the resilience resources available to a family in crisis (Lavee et al., 1985; McCubbin & McCubbin, 1996).

Lastly, the Double ABCX Model focuses more on coping skills and social support factors that can aid a family's adaptation to the crisis. The coping skills and social support factors occur on a family and community level. The adaptation needs of the family are met by other family members (internal restructuring) or by the community (external restructuring). The Double ABCX model focuses on the outcome of the crisis, which is called the XX factor. The outcomes (XX) are described as being on a continuum, namely family adaptation that ranges from the negative end of the continuum (maladaptation) – when there is a complete lack of adaptation – to the positive end of the continuum (bonadaptation) – when there is complete adaptation. The two ends of the continuum illustrate that the resolution process is more complex and not a once-off event (Becvar, 2012; McCubbin & McCubbin, 1996).

### *2.5.3 The Family Adjustment and Adaptation Response (FAAR) Model*

Assessments of and elaborations on the Double ABCX Model led to the development of the Family Adjustment and Adaptation Response (FAAR) model. The crisis situation is not seen as a fixed event, but entails the family adapting through complex processes and family functioning. As a result, this model focuses on describing the processes of the family's efforts to balance demands and resources. The model establishes a distinction between the adjustment phase and the adaptation phase in coping strategies (McCubbin & McCubbin, 1996). The

family's attempt to resist change when faced with a crisis or stressor is described as the adjustment phase. It is generally considered a sufficient short-term response to deal with less severe stressors. When families are first exposed to a stressor they are commonly reluctant to change their established patterns of family functioning. Families may respond to the stressor event through either removing the demands of the stressor (elimination), ignoring or denying the stressor (avoidance), or accepting the demands of the stressor (assimilation). However, if a family can no longer cope with the burden of the stressor and their attempts to eliminate or avoid the demands are unsuccessful, it will result in maladjustment (complete lack of adaptation) in a family, which spurs on the family crisis (Greeff, 2013; McCubbin & McCubbin, 1996).

Consequently, the family crisis increases the family's need for change in their established patterns of functioning. This marks the start of the family adaptation stage. The adaptation stage is a long-term response that is described as the process of restructuring family systems in an attempt to balance demands and resources in the face of a more severe crisis situation. Families may change their coping strategies, appraisals, resources and capabilities, including making the necessary changes to ensure family-to-community and member-to-family balance in the family system (McCubbin & McCubbin, 1996). The FAAR Model clearly differentiates between the adjustment and adaptation phases (McCubbin & McCubbin, 1996).

#### *2.5.4 The Typology Model of Family Adjustment and Adaptation*

Leading from the FAAR model was the development of the Typology Model of Family Adjustment and Adaptation, which focuses on the importance of the family's established patterns of functioning and the family's processes of appraisal (Becvar, 2012; Greeff, 2013; McCubbin & McCubbin, 1988). This model emphasises the significance of processes that already exist within the family's functioning when adapting to a crisis situation. In line with the FAAR model, the Typology Model of Family Adjustment and Adaptation describes family coping in terms of adjustment and adaptation. However, it improves on the FAAR model with precise additions. These additions include introducing family typologies (T), the family's established patterns of functioning, and vulnerability (V) due to the pile up of stressors. The Typology Model emphasises the importance of the family life cycle in terms of vulnerability and resilience. Lastly, the family schema (CCC), a family's beliefs, values and shared views, was introduced as an extra level of family appraisal, providing protecting factors against family stressors that may cause dysfunction (McCubbin & McCubbin, 1988).

These four models (the ABCX, Double ABCX, FAAR and Typology) paved the way for the formulation of the Resiliency Model of Family Stress, Adjustment, and Adaptation. The four models especially influenced the description of the adjustment and adaptation phases to bring family resilience to its most recent development (McCubbin & McCubbin, 1996).

### **2.5.5 Resiliency Model of Family Stress, Adjustment, and Adaptation**

The Resiliency Model of Family Stress, Adjustment, and Adaptation (from here on referred to as the Resiliency Model) is the most current model and based on the four previously discussed models (McCubbin & McCubbin, 1996). The model highlights harmony and balance as important family processes, particularly when a family faces adversity. The Resiliency Model incorporates family problem solving and family coping into the resilience framework. In addition, it distinguishes between the importance of the relational processes of adjustment and adaptation in the family, as well as between the family's established patterns of functioning as components of adjustment and adaptation. The Resiliency Model establishes four important factors critical to family recovery and functioning, namely (1) structure and function, (2) development, well-being and spirituality, (3) interpersonal relationships, and (4) relationships with the community. In addition to this, five important levels of family appraisal (Stressor appraisal, Situational appraisal, Schema, Coherence, and Paradigm) are distinguished, which are considered important in family recovery. Lastly, the model highlights the significance of culture and ethnicity, which were not included in earlier models of family resilience (McCubbin & McCubbin, 1996). Further in this section, the adjustment and adaptation phases of the Resiliency Model are discussed.

Researchers working on family resilience attempt to comprehend how a family can effectively acclimate themselves to recovering from adverse conditions or stressful events (Greeff, 2013; McCubbin & McCubbin, 1996). The Resiliency Model is multiphasic and dynamic in its function and structure. The model takes into consideration different variables that could influence the family system when stressors are experienced. The model makes five basic assumptions. Firstly, all families experience a crisis, as they are unavoidable within society (McCubbin & McCubbin, 1996). Secondly, during their lifespan, all families develop their own various skills, patterns and attributes that are used during such a crisis. Thirdly, the skills and attributes are different and unique in each family (McCubbin & McCubbin, 1996). Fourthly, families each have their own resources outside of the family and network of relationships, and this includes the broader community (McCubbin & McCubbin, 1996). Lastly, the stressor event

or crisis causes disharmony within a family system. Consequently, the crisis or stressor event is the catalyst for change and harmony in order for family balance to be restored and a sense of order to return within the family system (McCubbin & McCubbin, 1996).

### 2.5.5.1 The family adjustment phase

The adjustment phase (see Figure 2.1) in the family system involves a group of interacting components that affect the outcomes and processes for a family. The family attempt minor adjustments, without dramatically changing their traditional patterns of functioning, in order to manage daily strains that occur from a stressor. Several interacting components or forces in the adjustment phase influence the degree to which the family adjusts to a stressor event. The level of adjustment exists on a continuum from complete adjustment (bonadjustment) to a lack of adjustment (maladjustment). The main aim of the adjustment phase in a family is not perfect family functioning, but rather to reach an ideal level of functioning (Greeff, 2013; McCubbin & McCubbin, 1996). The interacting components in the adjustment phase (see Figure 2.1) are discussed below (McCubbin & McCubbin, 1996).

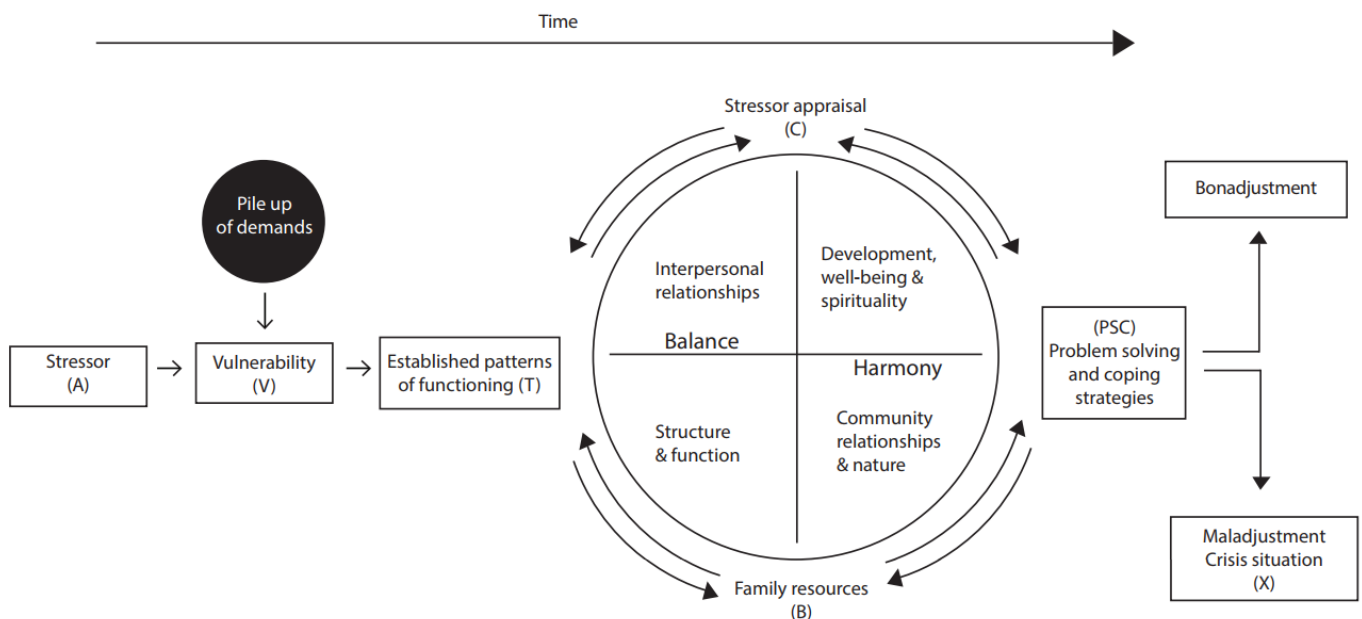


Figure 2.1. The adjustment phase of the Resiliency Model of Family Stress, Adjustment, and Adaptation (adapted from McCubbin & McCubbin, 1996).

The following interacting components are found in the adjustment phase: The stressor (A) and its severity for the family, which often causes a change in the family functioning, interacts with the family's vulnerability (V). The family vulnerability is shaped by the pile up of stressors or demands occurring at the same time of the stressor event. Vulnerabilities can include persistent financial problems, poor health of family members and normative family demands of day-to-day functioning. Family vulnerability (V) interact with the family's typology, their established patterns of functioning (T). These are considered as a set of characteristics or behaviours that explain how the family system functions and operates. The established patterns of functioning then interact with the family's resources, which can offer resistance to the stressor (B). Examples of resistant resources are communication between family members and the family's willingness to be supportive of each other. This interacts with the family's appraisal of the stressor (C), for example the family's shared understanding of the stressor affecting the family. This refers, in other words, to whether they see the problem as a minor challenge that can be overcome easily or as a major setback for the family. This interacts with the family's problem-solving and coping strategies (PSC), such as seeking advice from friends or support from the community. The PSC also refers to affirming communication patterns within the family. In response to family stress, all these components mentioned above (T, B, C and PSC) work together in the family's system to overcome stress by achieving a level of adjustment or resistance to the change (McCubbin & McCubbin, 1996).

Balance and harmony are vital components of the family system. When a family is faced with a stressor, they continuously try to pursue a state of well-being, characterised by vitality and energy. They achieve balance and harmony by reorganising the family system and restructuring methods of functioning. Changes in family roles, rules and responsibilities might occur to achieve a sense of balance. Such changes in a family's established patterns of functioning are likely to result in the family becoming imbalanced, during which disharmony can occur. Thus adjustments in the family's patterns of functioning are necessary to restore harmony and balance. There are four important domains that are affected by stressors and strains, namely the family's interpersonal relationships; the structure and function of the family; the well-being, development, and spirituality of all family members; and the family's relationships and interaction with the surrounding community and their environment. In the quest to restore harmony and balance, these domains become the main focus points within the family unit (McCubbin & McCubbin, 1996).



The level of adjustment is determined by all of the interacting components (A, V, T, B, C, and PSC). Often, family stressors do not create major hardships and rarely result in distress, for example if the stressor event is minor and the family has the fortitude to overcome the difficult and challenging period. In this event they are able to restore balance and harmony with ease and positively adjust to the stressor event without having to make major adjustments to the family's already established patterns of functioning. In this case, positive adjustment in a family system is termed bonadjustment. This is influenced by the family's accessibility to resistant resources, effective problem-solving and coping skills, established patterns of functioning and the manner in which the family appraise the stressor event (McCubbin & McCubbin, 1996).

Conversely, if the stressor event is considered severe and the demands that are placed on the family are too high, they will need to make drastic changes to their established patterns of functioning in order to achieve balance and harmony. Imbalances occur due to the drastic changes in established patterns of functioning. An example of drastic changes in functioning is if a husband takes up two or more jobs to afford transport for his wife. A family then experiences a level of maladjustment, as they cannot cope with the many changes in the family's functioning. This results in a family crisis (X) (see Figure 2.1). A family crisis is defined as a continuous condition of disorganisation, disharmony, incapacitation and disruptiveness in the family social system. The disharmony and imbalance in the family system call for changes in the established patterns of family functioning. Thus, the movement to restore stability, order and a sense of harmony marks the beginning of the adaptation phase of the Resiliency Model (McCubbin & McCubbin, 1996; Patterson 2002).

#### *2.5.5.2 The family adaptation phase*

The family is considered to be in a state of crisis when they realise that their efforts to adjust to the stressor are inadequate, resulting in their maladjustment. The family then enters the adaptation phase (see Figure 2.2) by initiating several changes to the family system. The adaptation phase is a process in which the family takes action to restore the balance between demands and family capabilities following a crisis (X). Adaptation happens on two levels: (1) between the family unit and the community and (2) between family members and the family unit (Patterson, 2002). The adaptation phase is determined by several processes that interact with one another. This will be explained further on.

If the family are in crisis it means that they have not reached a satisfactory level of adjustment and the established patterns of functioning (T) are deemed problematic. The circumstances of the family can worsen if their current pile up of stressors and demands (AA) contribute to the crisis, as families are rarely dealing with an isolated incident or stressor. To achieve a successful level of adaptation (XX), the family attempt to recreate balance and harmony to overcome the crisis. The objective of the adaptation phase is to restore harmony and balance within all four of the family’s most important areas of functioning. These four areas of functioning are (1) the family’s relationships with the community and environment, (2) development, wellbeing and spirituality, (3) structure and function and (4) lastly, interpersonal relationships.

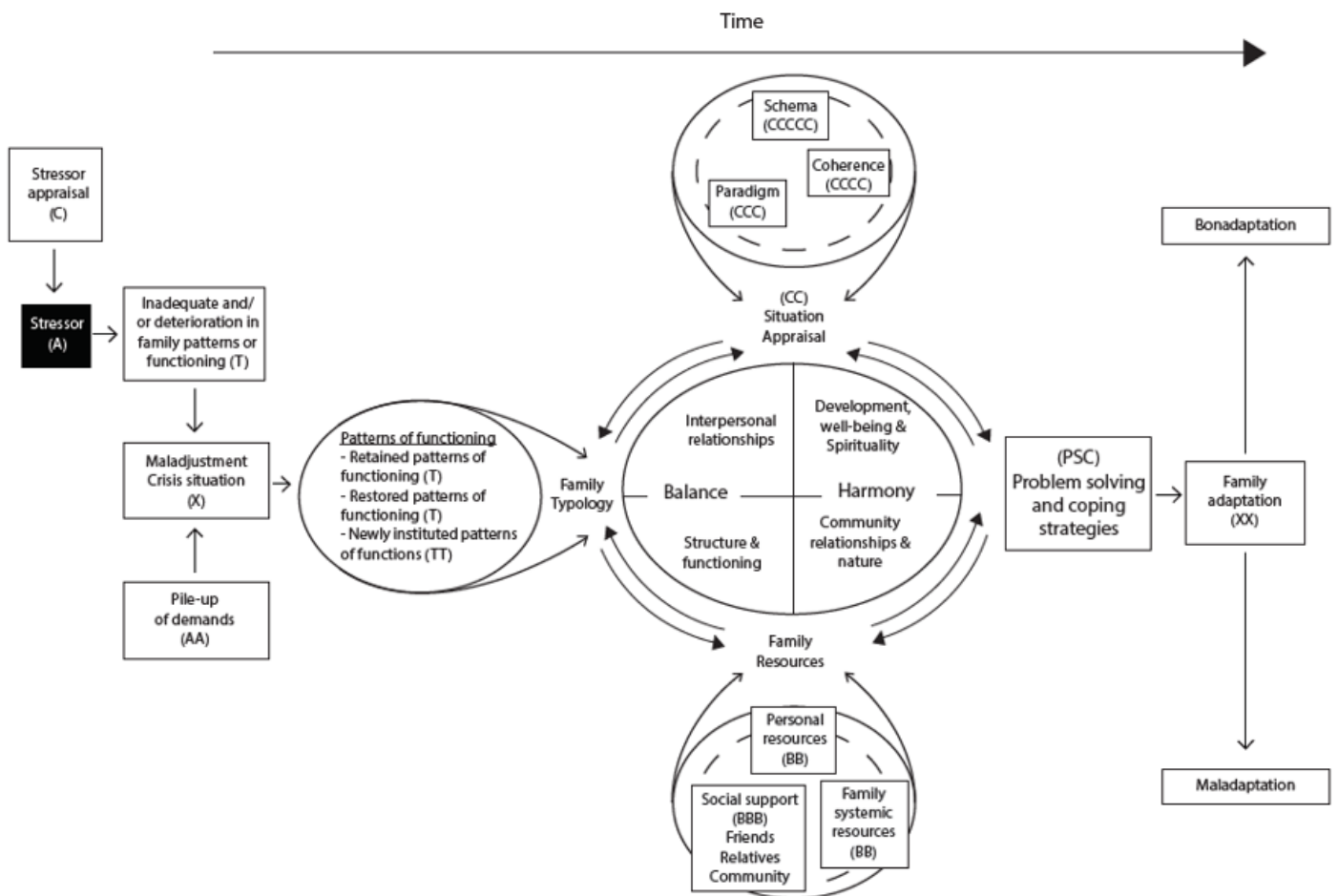


Figure 2.2. The adaptation phase of the Resiliency Model of Family Stress, Adjustment, and Adaptation (adapted from McCubbin & McCubbin, 1996).

Family adaption (XX) is viewed as the outcome of the family’s efforts to restore harmony and balance to the family system after a crisis situation. The level of family adaptation is determined

by the interactions between all the components involved in the adaptation phase of the Resiliency Model. The outcome lies on a continuum from successful adaptation, known as bonadaptation (the positive end of the spectrum) to unsuccessful adaptation, called maladaptation (the negative end of the spectrum) (McCubbin & McCubbin, 1996).

Whether bonadaptation is achieved, it is determined by a number of influencing factors in the adaptation process, such as the family's typologies used to restore balance and harmony (T & TT). The Resiliency Model notes four categories of typologies and established patterns of functioning (T) that play a role in family adaptation, namely: (1) retained patterns of functioning; (2) restored patterns of functioning; (3) newly instituted patterns of functioning and (4) inadequate family patterns of functioning. Patterns of functioning generally involve changes in family rules, boundaries, routines, relationships, communication and interactions with the community. In the face of adversity, such as having a family member with a severe chronic illness (such as breast cancer), the family may employ personal family resources (BB) and social support networks (BBB) to meet the demands of the crisis situation. Family resources are described as the family's ability to use resources, such as the individual family member, the family as a unit, and the community. The social support networks refer to the institutions that a family can make use of in times of stressful events and crisis situations. Social support networks are defined as extended family and friends (informal), schools, churches and medical professionals (formal). Social support also includes larger social structures, such as the government as a resilience resource. In the Resiliency Model, a family's social support is regarded as a vital factor in buffering against stress, irrespective of the type of support (McCubbin & McCubbin, 1996).

A family's appraisal process in crisis situations is regarded as important in the family adaptation process. McCubbin and McCubbin (1996) define five levels of the appraisal process. These are stressor appraisal (C), situational appraisal (CC), paradigms (CCC), coherence (CCCC) and schema (CCCCC). The family adaptation phase focuses primarily on three levels of appraisal: schema (e.g. family beliefs and values), coherence (e.g. the family's view on their sense of trust, predictability, management and order in relation to each other), and paradigms (shared expectations within the family). These three appraisal levels effect the situation (CC), as well as how the family defines the stressor (C). This refers to the family's view of their capabilities to overcome the stressor and crisis situation.

The family's established patterns of functioning (TT), appraisal processes (CC) and resources (BB) influence the type of problem-solving and coping (PSC) abilities they utilise and engage with. The PSC comprises certain coping mechanisms, problem-solving and conflict management within the family to overcome the crisis situation. A coping mechanism is described as specific covert or overt efforts used by families to handle the demands due to a stressor event. Problem-solving and coping mechanisms are considered as resources that reduce stress, help with management of the family system, utilise family resources and influence the family appraisal. Coping is considered a generalised response to a pile up of stressors that may lead to a crisis (McCubbin & McCubbin, 1996).

Over time, the family engages with dynamic relational processes, which introduce changes and modifications within the family system. The changes in the family system are directed at the main goal of maintaining and restoring balance and harmony in the four fundamental areas of functioning. If the family are unsuccessful at adapting they achieve a level of maladaptation, which means insufficient adaptation to a crisis (see Figure 2.2). This results in the family being in a state of crisis, where they engage in a cyclic process that returns them to a place of disharmony and unbalance. The adaption process then begins again, with the family making changes in the established patterns of functioning and returning to the process as described above. If the family has successfully adapted, they have moved to an improved level of functioning, which is known as bonadaptation (successful adaptation). According to the Resiliency Model, these families are able to largely maintain these newly established patterns of functioning (McCubbin & McCubbin, 1996; Patterson, 2002).

In the current study, the Resiliency Model (McCubbin & McCubbin, 1996) was used in conjunction with the Family Resilience Framework (Walsh, 2012, 2016) as the theoretical foundation for the study. Walsh (2003, 2012, 2016) has played an important role in contributing to family resilience theory through her research and by expanding on factors that promote resilience in a family. Walsh's (2002, 2012, 2016) key processes and themes complement McCubbin and McCubbin's (1996) Resiliency Model. Thus, by integrating these two theories a better understanding is obtained of the resilience factors that aid a family to cope in the face of adversity. Walsh's (2012) Family Resilience Framework will be discussed in the following section.

## 2.6 Walsh's Family Resilience Framework

Walsh (2012) contributed to family resilience theory by conceptualising resilience in terms of a systemic framework and introducing a relational resilience notion by viewing resilience from a family-systems perspective. According to Walsh (2003), the family resilience concept is a valuable framework within which to work, as it looks beyond the individual family member and focuses on the family as a functional unit in order to find potential resilience resources in the face of adversity. The family resilience framework focuses on family strengths rather than on family shortfalls. It emphasises how a family can improve their present situation and prepare themselves for future family challenges (Walsh, 2012). The framework presented by Walsh (2012) identifies key processes that can lessen the risk of vulnerability and stress in crisis situations, while developing the opportunity for growth in a family. Furthermore, the key processes empower families out of the crisis and prolonged stressful situation. Walsh (2012) identified three important domains that explain key processes in family resilience: (1) family belief systems; (2) family organisational patterns; and (3) communication. All three family domains have three important categories within each of them. In total, Walsh's resilience framework consists of nine important family processes (Greeff, 2013). These will be discussed in the following sections.

### 2.6.1 *Family belief systems*

Belief systems encompass how family members view adversity and make meaning of a crisis situation. Resilience is strengthened by shared beliefs that increase effective family functioning. Within the belief systems domain, there are three main family processes. These are making meaning of adversity, having a positive outlook, and transcendence or spiritual values and spiritual connections (Walsh, 2012).

Making meaning of adversity refers to families who are able to approach the crisis as a shared challenge and have the ability to work together effectively. Making meaning of adversity allows family members to draw strength from each other. Walsh (2012) suggests that the making-meaning process helps a family to normalise and contextualise the distress experienced by the family. The predisposition towards blaming and shaming other family members or the self is reduced when stressful situations are viewed as "normal" dilemmas. Families do well when there is a shared sense of coherence in dealing with the crisis. In addition, they can reframe the crisis as manageable, comprehensible and meaningful to grapple with in their

unique family context. Therefore, making meaning of adversity is to see a crisis as a shared family problem and to have a family sense of coherence (Walsh, 2012).

Hope is an essential and important aspect of having a positive outlook (Walsh, 2012). Hope helps families overcome undesirable situations and envision brighter futures for the family. An optimistic view on life is associated with well-functioning families, as it fuels hope and this assists in keeping families focused on overcoming obstacles, as well as dealing with the pressures that come with a crisis (Walsh, 2012). Determination and courage to overcome adversity play an essential role in building confidence in families to stay hopeful. Hopefulness can be increased in a family by mastering the art of the possible. This means that families can work together with resources or strengths that are readily available to them during difficult times. Affirming family strengths can counteract a sense of helplessness and reinforce a sustained positive outlook (Walsh, 2012). For example, when a family member is diagnosed with a chronic illness, the family may provide support to the sick family member, but still support each other through the stressful time. Therefore, during stressful periods a family may not always achieve overcoming the adversity, but rather learn how to manage the situation effectively with the available resources. This fosters an optimistic view and hopefulness when faced with hardships (Walsh, 2012).

During a crisis or adversity, a family may use transcendence and spiritual connections as resources in dealing with the crisis. Transcendence and spirituality provide deeper connections to the spiritual, cultural and traditional aspects of life. These resources can provide purpose and meaning to a family facing hardship (Walsh, 2012). Walsh (2012) acknowledges the importance of belief systems for families to envision a brighter future through positive outlooks, making meaning of adversity and spirituality.

Walsh (2012) also recognised a second important factor in family processes, namely family organisational patterns.

### *2.6.2 Family organisational patterns*

Organisational patterns incorporate how families organize their daily routines to meet life challenges to overcome adversity. Organizational patterns include various aspects that in a complex way contributes towards the way in which a family function. These three aspects are

flexibility and stability, family connectedness, and economic and social resources (Walsh 2012).

Flexibility in a family involves an openness and willingness to change. This is where a family understands that, in response to a stressor or crisis, they need to adapt in order for the family system to be balanced and in harmony (Walsh, 2012). A family then creates a “new normal” by changes in their organised patterns of functioning to fit new conditions. Walsh (2012) refers to this process as “bouncing forward”. At the same time, amidst the changes a crisis may bring for the family, the family need to restore stability, as vulnerable family members, such as children, need assurance of stability, dependability and predictability in times of turmoil. This can be achieved through shared rituals and routines, family time together, shared family meals daily and consistent sleeping patterns (Walsh, 2012). During a crisis it is important for parents to provide guidance, nurturance and protection for their children (Walsh, 2012).

Walsh (2012) suggests that resilient families support each other equally and respect each other’s differences and varied styles of coping with a situation. Connectedness is seen as an essential part of resilience and entails commitment, collaboration and mutual support for each other. A crisis in the family can cause interferences in the family functioning. This stressful situation can cause disruptions in the feeling of connectedness between family members who are unable to count on one another (Walsh, 2012). Each family member may view a crisis in a different way and attach his or her own meanings and experiences to the same event. Extreme periods of stressful situations can cause misunderstandings and conflict. Yet crisis offers the opportunity for reconnection and the repair of disconnected relationships (Walsh, 2012). Reconnection means keeping in contact with separated family members via telephone, social media and the internet. Connectedness, or any kind of contact, helps support a family emotionally and assist in their resilience (Walsh, 2012).

Finally, social and economic resources are important for resilience in families. Social and economic resources include kin, social networks, extended family, faith-based organisations, community groups and youth leaders (Walsh, 2012). These resources can be lifelines during adversity. Family participation in community faith-based gatherings can increase resilience within the family, as the members may feel a sense of belonging and get support from the larger community.

Walsh (2012) emphasises the importance of economic resources and financial security for the well-being of a family. A lack of economic resources to assist a family in times of hardship can upset any family system. A lack of monetary support can be derailing for families dealing with a chronically sick family member. For instance, a family with a mother diagnosed with breast cancer can drain family financial resources, with hospital bills and ongoing treatments that need to be paid (Walsh, 2012).

### *2.6.3 Communication processes*

Walsh's (2012) third domain is communication processes. Communication is seen as a vital process that facilitates resilience by bringing clarity to crisis situations. Communication encourages openness and emotional sharing and fosters collaborative problem solving within the family as a unit (Walsh, 2012). It should be noted that families in different cultures deal with emotional sharing and unpleasant news in different ways (Walsh, 2012). Walsh (2012) distinguishes between different aspects of communication in the family, namely clear and consistent information, open emotional expression and collaborative problem solving in the family. These aspects are discussed further on.

In stressful periods, communication often breaks down, as it may be easier to suppress feelings as a coping mechanism and avoid dealing with situations. Therefore, clarity and communication in crisis situations is effective, assist family functioning as well as avoid unnecessary hurt and somatic and behavioural problems. The family as a unit should be encouraged to speak together about the crisis that is occurring in the family (Walsh, 2012). Fears and worries of unspeakable events, such as an imminent divorce or serious illness, may further exacerbate family problems and hinder understanding. Families can achieve clarity by using consistent and clear messages, as well as by participating in the sharing of critical information about the crisis at hand or forthcoming expectations of each other during hardship. Clear information is important, as it avoids ambiguities that can surround a family crisis. It facilitates sharing the meaning of experiences, helps future planning for adverse conditions, and enables informed decision making (Walsh, 2012).

Families who support and encourage emotional expression create an atmosphere of trust and acceptance of differences without judgment (Walsh, 2012). In a family, a lack of open emotional expression may cause parents and children to suppress their emotions. This, in turn, could hinder the healing process of a family after a crisis, or the family could even fail to



overcome the adversity (Walsh, 2012). In such a situation, a therapist can provide an environment of emotional expression (Walsh 2012). Walsh (2012) suggests that finding humour in crisis events and celebrating positive occasions, such as birthdays, should be prioritised by the family, as sharing pleasurable experiences can form a positive connection and keep families functional.

Finally, collaborative problem solving and brainstorming resources are useful for overcoming adversity and contribute to resilience (Walsh, 2012). Shared decision making in families as a unit facilitates overcoming differences in understanding of a crisis and assists in conflict management between family members. Different family members may bring different strengths and resources to the crisis at hand. When solutions are discussed together as a family, this can bring about healing and growth. Families who actively work together to overcome adversity are more likely to meet future family crises and challenges successfully. Discussing family problems together assists in setting defined and attainable goals to support and enable the family in the future.

#### *2.6.4 Conclusion on Walsh's Theoretical Framework*

In conclusion, Walsh (2003; 2012) contributed to family resilience theory by linking systems theory and resilience. The ecological perspective accounts for the many different spheres that influence the family and play a part in family resilience. As a result of the family being an open system, the family is shaped by the broader sociocultural context. A family's unique perceptions, resources and challenges, along with the broader cultural and historical social system in which they function, ultimately have a significant effect on family resilience. Accordingly, it is important to consider the context of the family when considering ways to facilitate family resilience processes (Patterson, 2002; Walsh, 2003, 2012).

Family adaptation is affected by the family's expectations of how well they are able to handle a stressful event. Most of the time, stressors that affect a family are not isolated, fixed events, but rather characterisations of the family's history as well as of future events that influence the functioning of the family. From a developmental perspective, a family may judge from their own past experiences how to effectively reorganise the family unit after a disruptive event has occurred. Thus, family functioning is constantly being assessed as the family moves through time. The family adaptation process therefore is evolving continuously (Hawley & DeHaan, 1996; Patterson, 2002; Walsh, 2003, 2012).

The combination of the ecological perspective and the developmental perspective assists in the understanding of the distinctive nature of family resilience (Walsh, 2003; 2012). Family resilience is affected by the different pile ups of demands individual families may face, how the family respond to these demands of the stressful situation and, lastly, the socio-cultural context in which the family finds itself. However, despite the fact that various aspects can affect the resilience of families, Walsh (2003, 2012) found that family resilience can be attained by strengthening family processes in these three discussed family domains.

### **2.7 Advantages of selecting the Resiliency Model and Resilience Framework for the current study**

Family resilience theory provides an explanation for why some families thrive in adverse conditions, yet other families falter. Numerous South African studies have utilised the two theories discussed above as points of departure (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff & Thiel, 2012; Greeff & Wentworth, 2009; Greeff, Vansteenwegen, & Demot, 2006; Greeff et al., 2014; Jonker & Greeff, 2009). Furthermore, the theoretical framework for the current study, based on McCubbin and McCubbin's (1996) Resiliency Model and Walsh's (2003; 2012) Family Resilience Framework, provides a method of measuring the outcome of the family resilience process, namely family adaptation.

The Resiliency Model and Family Resilience Framework both fall within the positive psychology paradigm. Both theories are strengths based and focus on the strengths and qualities of a family forged under persistent hardship. Both theories offer a forward-looking, optimistic view, but do not disregard past problems that may still affect a family. However, they offer a shift from past failures and how problems were caused to how a family can progress in the future towards problem solving (Walsh, 2012).

Both theories utilised in this study acknowledge the fact that families evolve across a life cycle and that time has an effect on the family. The family functioning of those who live with a family member with a chronic illness, such as a mother diagnosed with breast cancer, is influenced by the course of the illness. For instance, if a mother has to attend chemotherapy for six months, followed by surgery and then radiation, the course of the illness will affect the normal family life cycle and their functioning changes. Since breast cancer is considered a chronic illness that moves through different phases of treatment, it should be viewed within a developmental context. The developmental pathway described in both theories allows for

assessing families in a contextual understanding of their pre- and post-crisis situation. Walsh (2012) asserts that resilience theory is not concerned with whether the illness will occur, but what will happen to the family when it occurs in the family unit. The forward-looking approach allows families to contextualise and normalise their experience of the illness in the family (Walsh, 2012).

Both theories humanise illness and its challenges, and therefore help to maintain family morale. This is particularly useful for families with a chronically sick family member, such as a mother with breast cancer. Mothers with breast cancer in family units can often feel abnormal or experience a lack of health in comparison with members of other, healthy and seemingly well-functioning families (Walsh, 2012). Hence, the resilience process offers families facing illness the opportunity to think of their crisis in a positive light by focusing on strengths, rather than viewing the family as a victim of circumstances (Walsh, 2012). Such an approach is grounded in the perspective that all families have the potential for growth and transformation, and that they can grow in resilience, despite the severe trauma or adversity experienced (Walsh, 2012).

The Family Resiliency Model and Resilience Framework are not conditioned to fit all families, but must be assessed in the cultural and ethnic contexts relevant to each family structure, resources, life challenges and family values (Walsh, 2012). Therefore, it is important to consider the broader social and cultural context in which the family is situated when assessing family functioning. Walsh's (2012) Family Resilience Framework and McCubbin and McCubbin's (1996) Resiliency Model relate to a broad range of problem situations and a wide range of populations. This is essential in the culturally diverse South African context.

These advantages provide the motivation for the relevance of these theories for this study, specifically in a South African context, and in relation to families with a mother diagnosed with breast cancer. Both models take into account the effect of time on the family life cycle, and both models acknowledge that there is no one way to approach effective family functioning.

## **2.8 Conclusion**

The study of resilience is located within the positive psychology paradigm. Resilience is increasingly becoming an important construct for families in modern times. This chapter expanded on the main family resilience concepts utilised in this current study. Definitions of

family resilience and the evolution of family resilience theories were discussed in detail. The Resiliency Model was preceded and influenced by four earlier models. Previous research had highlighted the limitations of these models, which resulted in the evolution of the model to its current form – the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996). The second theory discussed in this chapter is Walsh's (2012) Family Resilience Framework, which includes three important domains. These are family belief systems, family organisational patterns and, lastly, communication processes. The resilience theories are used in conjunction with one another and form the theoretical foundation for this current study.

The resilience theories aim to understand pressures that families may face. This is highlighted by the degree of hardships that face humanity daily. Resilience is not seen as a clearly defined quality, but rather as a relational system within families, which are connected to and part of a community and broader social and cultural context.

Psychology as a discipline, with a theoretical understanding of family resilience theory, aims to provide support to families in a crisis. This can be done through empowering families by providing them with knowledge and potential skills to strengthen their family system.

In the next chapter, a literature review of relevant studies, focusing on the resilience characteristics of families faced with a crisis, will be discussed.

## CHAPTER 3

### LITERATURE REVIEW

#### 3.1 Introduction

Previous research similar to this study was found via the electronic databases and thesis database of Stellenbosch University (SUNScholar). The databases were EBSCOhost (Academic Search Premier), PsychARTICLES, Taylor and Francis Journals, PubMed Central and Wiley Online Library. The keywords used in the search were “breast cancer”; “breast cancer and coping”; “breast cancer and coping behaviours”; “breast cancer and coping strategies”; “family resilience”; “family adaptation”; “family resilience and chronic illness”; “family resilience and breast cancer”; and “chronic illness and coping”. To identify additional citations, the references of the literature found were also reviewed. The literature search produced no studies on resilience in families with a mother diagnosed with breast cancer in a South African context or internationally. In other words, no other strengths-based, empirical research was found that investigated a family’s ability to adjust and adapt to having a mother diagnosed with breast cancer. However, various types of studies relating to family resilience, from a strength-based perspective that utilised the Resiliency Model (McCubbin & McCubbin, 1996), were found in the literature search in relation to families facing other chronic illnesses (Bishop & Greeff, 2015; Deist & Greeff; 2015; Greeff & Thiel, 2012; Radina & Armer, 2004). In this chapter I review the current literature on breast cancer and coping. This chapter will begin with an explanation of breast cancer as a stressor event and a family crisis.

#### 3.2 Breast cancer as a stressor event and a family crisis

The breast cancer diagnosis for the mother of a family is regarded as a family crisis and stressor event. Crises and challenges are part of everyday life and are inherent to the human condition (Walsh, 2012). All families are challenged by adversity in some form. According to the Resiliency Model (McCubbin & McCubbin, 1996), the resilience process is instigated by a stressful event. The stressor event or crisis situation is known to disrupt a family’s established patterns of functioning and cause a state of imbalance and disharmony. Furthermore, the family’s appraisal of the crisis situation influences the impending stability of the family system. When serious illness strikes, such as a mother diagnosed with breast cancer, hardships are

numerous, family resources may be depleted and the demands on the family system are high (McCubbin & McCubbin, 1996).

The severity of illness of a chronically ill family member, such as a mother diagnosed with breast cancer, may significantly affect family adaptation after the diagnosis. In Greeff and Thiel's (2012) study, the authors investigated resilience characteristics in families where a husband had been diagnosed with prostate cancer. Greeff and Thiel (2012) reported in their study that the severity of the prostate cancer was regarded as a source of stress for the family and affected the level of family adaptation. Twenty-one husbands and their wives were asked an open-ended question and were required to complete seven self-report questionnaires. Greeff and Thiel (2012) found that seeking professional support and knowledge from psychologists and doctors had a significant effect on the families' adaptation. This is echoed in the work of Bishop and Greeff (2015), who conducted a study on resilience in families with a family member diagnosed with schizophrenia. Schizophrenia in a family member was deemed a family crisis due to the burden placed on families (Bishop & Greeff, 2015). Bishop and Greeff (2015) identified that seeking information about the mental illness schizophrenia, about how to administer medication and about coping with schizophrenia from psychiatrists and psychologists, as well as reading books on schizophrenia, assisted the families to adapt to the crisis. Similar results on information seeking were obtained by Jonker and Greeff (2012), who identified qualities and factors associated with successful adaptation in families living with people with mental illness. These studies (Bishop & Greeff, 2015; Greeff & Thiel, 2012; Jonker & Greeff, 2009) indicate how other illnesses, such as prostate cancer or mental illness, can be deemed a family crisis similar to a family with a mother diagnosed with breast cancer.

The findings of the above-mentioned studies, for instance on seeking information and professional support, could assist in the understanding and development of interventions that encourage family resilience and effective family adaptation to the crisis situation in this current study (the diagnosis of breast cancer). In the next section, major themes that emerged from current international literature on breast cancer and coping from an individual perspective will be discussed.

### **3.3 Breast cancer research in current coping literature**

In this section, the literature on breast cancer and on coping is divided into two major themes. The first theme, the breast cancer patient and dyadic relationships, focuses on cancer patients

and their individual experiences, followed by the relationships between the cancer patient and important people in their lives, for example their husbands and children (dyadic relationships). The second theme that will be discussed is the quality of life after a cancer diagnosis for an individual, followed by family survivorship after a cancer diagnosis.

### *3.3.1 Breast cancer patients and dyadic relationships*

Conventionally, researchers investigating the experience of cancer have focused on the ill individual (cancer patient) and extensively documented their coping styles and coping behaviours (Kershaw et al., 2004; Kvillemo & Branstrom, 2014; Lim, 2014). Several authors (Kvillemo & Branstrom, 2014; Lifford et al., 2015; Sharpley, Bitsika, & Christie, 2010) have come to the conclusion that the role of breast cancer in family life is largely understudied. A cancer diagnosis affects not only the patient, but her loved ones as well (Wolf, 2014). Few authors (Radina & Armer, 2004) have documented how the family, as the unit of analysis, cope with and adjust to the stressful circumstance of having a mother diagnosed with breast cancer. The nature of the relationships between cancer patients and important people and family members in their lives is regarded as an important theme in the literature. These include the physician-patient relationship and other family member dyads in the patient's life. The different dyadic relationships will be discussed in this section.

Open, clear communication on health-related matters between physician and patient is considered a cornerstone of coping with breast cancer and contributes to a better quality of life after a cancer diagnosis. Trudel et al. (2014) conducted a longitudinal survey study with 120 French-speaking women in hospitals in Montreal, Canada. The women in the study were diagnosed with stage I and stage II breast cancer and were 18 years of age and older. The patients were required to complete a survey on the topic of the medical support they were receiving through communication from doctors and nurses over a period of one year. The surveys were completed at different stages of treatment: (a) between diagnosis and surgery; (b) halfway through radiotherapy; and (c) at follow-up. It was reported that the patients' perceptions of their own communications skills with the physician resulted in a better quality of life as opposed to those women who found it difficult to communicate with the doctors. Open communication between the two parties had many advantages (Trudel et al., 2014). The women reported better quality of life and coping with breast cancer when they had confidence in their communicating skills towards physicians. In addition, the women reported that they had better physical and emotional health, as well as fewer side effects during radiotherapy

sessions (Trudel et al., 2014). As a result, proactive information seeking is regarded as a vital source of coping to enhance quality of life and recovery after a breast cancer diagnosis (Trudel et al., 2014). On the other hand, Kershaw et al. (2004) reported that patients found problems communicating with health professionals and doctors. Difficulty in communicating with doctors resulted in patients feeling uncertain about their cancer diagnosis and they reported higher levels of stress and anxiety. Open communication between breast cancer patients and doctors is an important aspect of coping with breast cancer in the coping literature from the individual perspective (Kershaw et al., 2004; Trudel et al., 2014). Open communication is also considered vital between women who have breast cancer and other important people or family members in their lives, such as husbands, daughters, sons and sisters (Mellon & Northouse, 2001).

Additional important dyadic relationships with family members are mentioned in the literature (Davey, Niño, Kissil, & Ingram, 2012; Feldman & Broussard, 2006; Kim et al., 2008; Skerrett, 2003). Examples of these relationships are between a husband and his spouse (Feldman & Broussard, 2006), the cancer patient and her children (Davey et al., 2012), and between mother and daughter (Kim et al., 2008). These family dyads have been well documented.

Davey et al. (2012) reported on African American parents' experiences navigating breast cancer while caring for their children. This study looked at the relationship between parent and child and not the family unit as a whole. Davey et al. (2012) reported that mothers felt an increasing need to protect their children, as well as to be open and honest with them throughout the breast cancer process. In addition, the mothers had general concerns about the well-being of their children and how they were coping after the diagnosis.

Kim et al. (2008) point out that mothers with breast cancer play an important role in their daughter's quality of life. In their study, 98 mothers and daughters were required to complete a survey on their quality of life. It was reported that daughters with mothers who had breast cancer were psychologically distressed and reported poor quality-of-life outcomes. Similarly, Feldman and Broussard (2006) described the relationship between husband and wife. This included the husband's adjustment to his wife's breast cancer diagnosis. Feldman and Broussard (2006) reported that husbands of women with breast cancer were adjusting and coping negatively when their partners were physically sick. As a result, this affected other areas of the couple's lives, such as their relationship with each other and other family members, their work and sleep, as well as their intimacy and sex lives. These studies (Davey et al., 2012;



Feldman & Broussard, 2006; Kim et al., 2008; Skerrett, 2003) report extensively on a breast cancer diagnosis and the adjustment of significant family dyads in a cancer patient's life. These relationships show that there are several significant problems experienced by both the cancer patients and in family member dyads.

As a result of researchers focusing solely on the ill individual and the process of adjustment in family member dyads, limited information is available on how the family as a unit adjusts, adapts and manages with the cancer diagnosis (Wolf, 2014). Consequently, coping with breast cancer is considered a family task (Feldman & Broussard, 2006; Mellon & Northouse, 2001). Additional information on resilient resources resulting from family bonds and relationships, is desirable for both cancer patient and family members after a breast cancer diagnosis (Mellon & Northouse, 2001). A number of authors have suggested that future studies should focus on the family's level of resilience when a mother has been diagnosed with breast cancer (Lim, 2014; Mellon, 2002; Mellon & Northouse, 2001; Radina & Armer, 2004; Wolf, 2014).

The second theme found in the breast cancer and coping literature is the quality of life after the cancer diagnosis. This will be discussed in the following section.

### *3.3.2 Quality of life after the cancer diagnosis*

The quality of life of cancer patients is an important dimension in the breast cancer and coping literature. In the literature, quality of life and family survivorship after a cancer diagnosis refer primarily to coping strategies or coping methods by an individual (Mellon & Northouse, 2001). Quality of life after a cancer diagnosis and survivorship are terms that are used interchangeably throughout the literature, and have been reported on thoroughly by numerous authors (Achimas-Cadariu, Iancu, Pop, Vlad, & Irimie, 2015; Kershaw et al., 2004; Lim, 2014; Mellon, 2002; Mellon & Northouse, 2001; Salonen, Kellokumpu-Lehtinen, Tarkka, Koivisto, & Kaunonen, 2011). In this section, the findings of different studies focused on individual quality of life and survivorship after a cancer diagnosis will be discussed. Although the quality of life for a cancer patient is focused on the individual, it will assist in contributing to knowledge of resilience and coping methods that families with a mother diagnosed with breast cancer may utilise.

The survivorship of breast cancer begins at the time of diagnosis and continues throughout the woman's lifetime (Mellon & Northouse, 2001). Anxiety, depression and emotional distress are

experienced by breast cancer patients from the time of diagnosis (Love & Lindsey, 2010). The many different ways that breast cancer patients cope with the stress and anxiety they experience after the diagnosis are commonly mentioned in the literature (Achimas-Cadariu et al., 2015; Kvillemo & Branstrom, 2014; Mukwato, Mweemba, Makukula, & Makoleka, 2010; Yoo, Levine, & Pasick, 2014). Coping is largely defined as strategies such as thoughts and/or action responses used by an individual in response to a stressor. These actions and/or thoughts are used to change and adapt to stressful circumstances or a triggering incident (Kvillemo & Branstrom, 2014; Yoo et al., 2014). Although coping implies that an individual has merely survived a stressful experience, it does not suggest success in overcoming the stressful situation better equipped to handle future challenges (Mukwato et al., 2010; Walsh, 2012). The most common forms of coping found in the breast cancer and coping literature (Gregg, 2011; Lim, 2014; Mukwato et al., 2010; Trudel et al., 2014; Yoo et al., 2014) on an individual level are: spirituality, religion and God, communication, social support and seeking information. These aspects of coping found in the literature are discussed briefly below.

Facilitating factors in coping with breast cancer are often associated with reliance on religion, spirituality and God (Doumit, Huijjer, Kelley, Saghir, & Nassar, 2010). A study on coping with breast cancer in Lebanon by Doumit et al. (2010) reported that women found a sense of hope knowing that God was in control of their life. The results of the study suggest that the women believed the disease (cancer) was from God (Doumit et al., 2010). In line with the idea of God as a facilitating coping mechanism, other studies in different areas of the world reported that a belief in God helped women to accept the diagnosis and to cope with breast cancer (Gregg, 2011; Mellon, 2002; Mukwato et al., 2010; Yoo et al., 2014).

In a qualitative study on breast cancer and the relationship with religion and God as a coping mechanism, 23 black American women respondents described their relationship with God and religion, and 16 women reported on their relationship with Jesus Christ (Gregg, 2011). One woman described her relationship with Jesus and said, “The first person I told about my diagnosis was Jesus. The best medicine for me was prayer and Jesus” (Gregg, 2011, p. 1047). God was considered the most powerful source of coping for women during treatment for and survivorship of the breast cancer diagnosis. This demonstrates that religion and God play a pivotal role in these women’s lives and assisted them in coping after being diagnosed with breast cancer. God is reported to be their inspiration and source of strength (Gregg, 2011).

Following religion and God, communication was frequently mentioned in the breast cancer and coping literature. Lim (2014) examined 32 family communication dyads and quality of life in Asian-American breast cancer survivors in a hospital in Los Angeles. On the basis of a cross-sectional survey design, Lim (2014) reported that general communication about the cancer experience with family members was a strong predictor of positive mental and physical well-being. Similarly, Trudel et al. (2014) propose that proactive information seeking and education regarding the breast cancer diagnosis from health professionals (physician-patient relationship) affirm coping capabilities. Generally, families become stressed when a family member is ill. As a result, the need for information on the symptoms, causes and management of the illness can assist in coping effectively (Mukwato et al., 2010).

An additional form of coping mentioned in the literature is the woman's efforts to continue with normalcy in the family, regardless of her cancer diagnosis (Mellon, 2002). Wolf (2014) conducted interviews with family members of breast cancer survivors in America and reported that a cancer diagnosis reduced individuals to patients. They feel as if they are no longer seen as normal people, or even as mothers. Patients found themselves looking for ways to escape their sick role and to maintain the normal state of a "healthy person's" existence. In the same light, Gregg (2011) reported that women wanted to carry on doing their 'womanly' duties of caretaking, despite the fact that they were diagnosed with breast cancer.

In the light of the above, there are several studies that focus on the quality of life of cancer survivors and different methods of coping from the individual perspective. Lim (2014), Mellon (2002) and Wolf (2014) interviewed a family member nominated by the cancer survivor – either a husband, son, daughter or sister. This method makes for multifaceted and rich data collection (Mellon, 2002). However, it has limitations at a family level of functioning, as it is only a dyadic view on coping. Similarly, Mellon (2002) studied cancer survivors and their family member's quality of life and the meaning of the illness, one to six years after treatment. The results do not show how the family as a unit coped with having a family member diagnosed with cancer, but rather the coping of family dyads (Mellon, 2002).

These studies that focused on the quality of life following a cancer diagnosis are important, as they offer some insight into how individuals may cope with and adjust to the cancer experience. Various authors (Kershaw, 2004; Lim, 2014; Mellon, 2002; Wolf, 2014) have separated the findings in terms of women with breast cancer and their coping styles and family members' coping styles. These studies offer insights into the coping strategies used, although they focus

solely on the individual coping experience and fail to mention the resilience factors of the family as the unit of analysis – as a whole interacting system.

As there is limited information on the family unit and its experience of coping with cancer, further research is needed (Mellon & Northouse, 2001). Research in cancer studies should move towards looking at the family as the unit of analysis, offering better insight into ways in which families interact, adjust and adapt after the cancer diagnosis (Mellon, 2002; Wolf 2014). In the coping literature, coping merely suggests that the families are surviving the stressor of a chronically sick individual and does not address familial issues. As Walsh (2012) suggests, resilience offers the opportunity for personal growth and family transformation, which is forged out of the crisis situation. Key resilience processes, which will be identified in this study, will indicate how families can emerge more resourceful and stronger.

In the subsequent section, the most prominent study on resilience and breast cancer found in the literature review will be discussed.

### **3.4 Resilience among women living with lymphedema in the context of their families**

Family resilience studies regarding a mother who has been diagnosed with breast cancer in a South African context are currently non-existent. However, there is one study that was conducted with European women living with lymphedema – the swelling of the arm following a breast cancer diagnosis. The study focused on one specific aspect of resilience, namely family routines and activities (Radina & Armer, 2004). This study will facilitate the understanding of family routines with a mother diagnosed with breast cancer in a South African context.

Radina and Armer (2004) used the family as the unit of analysis to understand what makes certain families more resilient than others. The women suffering from lymphedema were interviewed qualitatively. Radina and Armer (2004) considered families with qualities associated with bonadjustment and bonadaptation as resilient, and those families that possessed qualities associated with maladjustment and maladaptation as being in a crisis.

Normal patterns of family functioning may no longer be an option for families with a mother diagnosed with breast cancer, as mothers' face difficulties fulfilling normal, everyday tasks (Radina & Armer, 2004). Radina and Armer (2004) identified family vulnerabilities, including the modification of daily routines and work-related tasks that mothers could not perform due

to their lymphedema. Women reported frustration at being unable to complete normal household chores, and at living with the constant reminder of breast cancer due to their swollen arm. In their study (Radina & Armer, 2004), family members sought to offer support by shifting family roles and responsibilities. For example, husbands took on additional family chores or offered words of support and encouragement, while new patterns of functioning revolved around the chronically ill family member (Radina & Armer, 2004; Wolf, 2014).

The families that were considered resilient were described as making significant changes within the family's functioning. These included husbands changing employment times and routines to suit the wife's needs and capabilities, and a shift in family household responsibilities (Radina & Armer, 2004). It was also found that families who used humour to cope showed successful adaptation to the crisis (Radina & Armer, 2004).

A family crisis was reported when families could not adjust or adapt to restore harmony and balance within the family functioning and eventually started to deteriorate. A lack of reliable support and resources for the family rendered their situation worse, and the family were unable to reach an adjustment or an adaptation phase. Instead, the family were likely to continue to exist in a state of crisis (Radina & Armer, 2004).

Radina and Armer (2004) concluded that future research should look at how the individual affected by breast cancer and her family cope with and move beyond the vulnerabilities mentioned. Although Radina and Armer's (2004) research is very similar to my current study, it is limited in the methodology used to obtain the conclusions. Only one type of research approach was utilised in the data collection process, and using one method has its own limitations and biases. Secondly, the data was collected from a secondary source of interviews. Lastly, the sample consisted of only six individuals, which may reflect biases and limits wider, transferable conclusions. However, the study does shed some light on resilience factors that may exist for families with mothers who have been diagnosed with breast cancer in a South African context.

The next section will discuss South African literature that utilises the Resiliency Model (McCubbin & McCubbin, 1996) in families facing different types of adversities. This will assist in understanding possible resilience characteristics present in families with a mother diagnosed with breast cancer.

### 3.5 A comparison of South African family resilience literature

A few international studies were found that relate to resilience resources and factors in families facing different types of adversities (Anurahda, 2004; Greeff et al., 2006; Mellon & Northouse, 2001; Radina & Armer, 2004). In addition to this, several studies in a South African context that utilised the Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin & McCubbin, 1996) and Walsh's (2012) Family Resilience Framework as a theoretical foundation were identified in the literature. These family resilience studies were conducted to identify resilience resources, strengths, characteristics and attributes in families in which a crisis had occurred. These attributes may also be applicable to families with a mother diagnosed with breast cancer. These studies were reviewed and related to families overcoming a crisis or adversity. Examples are a family member diagnosed with a chronic illness, such as a family with a child diagnosed with cancer (Greeff et al., 2014); a family with a child with a developmental disability (Greeff & Nolting, 2013); a family with a child with a physical disability (Greeff, Vansteenwegen, & Gillard, 2012); a husband with prostate cancer (Greeff & Thiel, 2012); a family living with a person with a mental illness (Jonker & Greeff, 2009); a family caring for a family member with dementia (Deist & Greeff, 2015); and lastly, families with a family member diagnosed with schizophrenia (Bishop & Greeff, 2015).

All these abovementioned studies used a mixed methods, cross-sectional (once-off) survey research design and utilised self-report questionnaires (quantitative) and open-ended questions (qualitative) to collect the data, while the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996) and the Family Resilience Framework (Walsh, 2012), as discussed in Chapter 2, served as theoretical point of departure. These studies illuminate the different characteristics, strengths and resources that facilitate family adaptation in different South African contexts.

As elaborated on in Chapter 2, Walsh (2003; 2012; 2016) identified three family resilience domains that assist family adaptation during a crisis situation, namely (1) belief systems; (2) organisational patterns; and (3) communication. Further on in this literature review I will briefly discuss reported South African studies by relating them to the three family domains proposed by Walsh (2012). The identified resources and strengths found in these studies can be considered as potential resilience resources for families with a mother diagnosed with breast cancer. In the next section I discuss Walsh's (2012) first domain, which is family belief systems.

### 3.5.1 *Family belief systems*

Walsh's (2012) Resilience Framework points out that families are better able to cope and adapt to the diagnosis of a chronic illness if they are able to assign positive meaning to the crisis situation. For instance, families' shared beliefs on a crisis event increase family problem solving, facilitate the meaning-making process, and offer a positive outlook and a chance for spiritual connection. In the same way, McCubbin and McCubbin (1996) suggest that a family's appraisal of the situation influences the severity of the crisis to the family. Thus, the family's making-meaning process shapes the family's ability to accept a crisis event or come to terms with a diagnosis. A family's ability to select an adequate coping response assists in family adaptation.

When a crisis strikes a family, they do best when they are helped to make sense of the situation. Thus, by reframing the situation in a positive light they are able to see the family problem in a more manageable and comprehensive way (McCubbin & McCubbin, 1996; Walsh, 2012). A number of studies have found a positive relationship between assigning a positive meaning to a crisis situation and family adaptation (Bishop & Greeff, 2015; Greeff & Thiel, 2015; Jonker & Greeff, 2009).

Greeff and Thiel (2015) researched the resilience characteristic of husbands with prostate cancer. The study sample consisted of 21 husbands diagnosed with prostate cancer, and their wives. The mean age of the husbands in the study was 68 years, while the mean age of the wives was 64 years and the mean length of marriage was 40 years. Husbands and wives were asked to complete the following self-report questionnaires independently: the Family Attachment and Changeability Index 8 (FACI8); the Family Problem Solving Communication questionnaire (FPSC); the Family Hardiness Index (FHI); the Social Support Index (SSI); the Family-Crisis Oriented Personal Evaluation Scales (F-COPES); and the Relative and Friend Support Index (RFS). Greeff and Thiel (2012) found a significant positive correlation between positive reframing and family adaptation for the subgroup of wives. Similarly, Jonker and Greeff (2009) found a significant positive correlation between passive appraisal of a crisis situation and family adaptation for families living with a person with a mental illness. Passive appraisal refers to the family's ability to accept a crisis situation while minimising the way they react towards the issue or adverse circumstance. Jonker and Greeff's (2009) data was gathered from 34 family representatives living in an underprivileged area. In the same light, information seeking and acquiring knowledge through professionals such as doctors or nurses had a positive

influence on family adaptation (Greeff & Thiel, 2012). Other sources, such as the internet or self-help books, were also regarded as important factors in the meaning-making process for families with a husband with prostate cancer and families living with a family member with schizophrenia (Bishop & Greeff, 2015; Greeff & Thiel, 2012). Information and knowledge on a chronic illness help families come to terms with the crisis situation and lower anxiety and stress levels arising from an unknown illness, such as autism and schizophrenia (Bishop & Greeff, 2015; Greeff & Du Toit, 2009).

Within the belief system domain, optimism is described by Walsh (2012) as fostering hope for the future. Several studies support a positive outlook and optimism is associated with family adaptation (Deist & Greeff, 2015; Greeff & Thiel, 2012; Greeff & Wentworth, 2009). A positive outlook is said to empower a family to master their life challenges by looking towards future possibilities. A positive view on a crisis helps the family to reinforce confidence, reframes their situation and assists them to accept that hardships in life are out of their control and that they should accept what cannot be changed. In addition, it promotes a “can do” attitude (Walsh, 2012).

Family hardiness was measured with the Family Hardiness Index in these studies (this measure will be discussed in detail in Chapter 4). It measures the family’s ability to embrace change, reframe situations as more manageable and challenge their own beliefs (McCubbin & McCubbin, 1996). Family hardiness also includes the family’s commitment to work together in crisis situations, as well as the family’s sense of being in control of their family situation (Deist & Greeff, 2015). Family hardiness has been found to be a resilience resource and strength in multiple family studies (Deist & Greeff, 2015; Greeff & Thiel, 2012; Greeff & Wentworth, 2009).

According to Greeff and Thiel (2012), family hardiness alleviates the effects of stress felt by family members, as they feel a sense of control and are able to adapt to the prostate cancer diagnosis of a husband in the family. In essence, the families were not easily destroyed by stressful events and showed the ability to work together despite their circumstances. This implies that the families were able to adapt to the crisis. Similarly, Deist and Greeff (2015) studied 44 spouses caring for a person with dementia. It was found that family hardiness was strongly associated with family adaptation. Similarly, families that had a family member diagnosed with a chronic sickness, such as heart disease, cancer or dementia, indicated that



family hardiness is a vital factor that assisted the family in adjusting and adapting to the stressful circumstances after the diagnosis (Greeff & Thiel, 2012; Greeff & Wentworth, 2009).

The final factor to be discussed under the family belief systems umbrella is spirituality, faith and possessing a larger purpose in life. This resilience resource has been reported on extensively in the literature (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff & Human, 2004; Greeff & Thiel, 2012; Greeff & Van der Walt, 2010; Jonker & Greeff, 2009). In Greeff and Joubert's (2007) qualitative study on spirituality as a family resilience resource after a parent had passed away, 25 widowed parents held the belief that religion was their "rock" that assisted their families to adapt after the death of their spouse. Many participants mentioned that they had felt closer to God, or that their faith had grown stronger, during the process of suffering and loss. Half of the participants believed that God would not let death happen to their family without a greater reason or purpose (Greeff & Joubert, 2007). Several family resilience studies have indicated that spirituality and religion are not only a positive resource assisting families in adaptation, but are also considered the most important factor for families in dealing with a crisis like or chronic illness or the loss of a parent (Greeff & Human, 2004; Greeff & Joubert, 2007; Greeff & Thiel, 2012).

Spirituality, or being connected to a religious community, has been proven in several studies to be a coping mechanism for families to understand their adverse conditions and make sense of their suffering (Greeff & Du Toit, 2009; Greeff & Human, 2004; Greeff & Joubert, 2007; Greeff & Thiel, 2012). Although religion and spirituality are established as resilience resources for families facing different types of adversity, it should be noted that these aspects were confirmed only through the qualitative data and not from the self-report questionnaires' quantitative data (Deist & Greeff, 2015; Greeff & Du Toit, 2009; Jonker & Greeff, 2009).

In short, family belief systems include making meaning of adversity (Greeff & Thiel, 2012), fostering a positive outlook (Deist & Greeff, 2015), and spirituality, religion and faith in God (Greeff & Joubert, 2007). Family organisational patterns as proposed by Walsh (2012) as a second domain of family resilience will be discussed in the next section.

### *3.5.2 Family organisational patterns*

According to Walsh (2012), family organisational patterns are characterised by connectedness (cohesiveness), flexibility and broader community networks and social support. Cohesiveness

is described by Walsh (2012) as a resilience resource that promotes connectedness within the family. It allows the family the opportunity to mutually support one another, commit to family responsibilities and collaborate with each other during stressful periods and adverse conditions (Black & Lobo, 2008; Walsh, 2012).

In Jonker and Greeff's (2009) study, a significant positive correlation was found between the family's ability to work together and family adaptation. This is echoed in the qualitative results, where 61.8% of the participants recognised the importance of family strengths such as emotional support, practical support as well as respect and love for one another while living with a mentally ill family member. These results are confirmed in Bishop and Greeff's (2015) study, where family time and routines that promote family togetherness, such as special events or occasions like birthdays, were associated with positive family adaptation. When family members come together and keep in contact with one another it is significantly associated with family adaptation in families with a family member with schizophrenia (Bishop & Greeff, 2015). In fact, family routines have been identified as a prominent resilience resources by several researchers in South African family resilience studies (Greeff & Du Toit, 2009; Greeff & Wentworth, 2009; Greeff et al., 2012).

Secondly, flexibility in family organisational patterns is considered a vital quality in resilience (Walsh, 2012). Families may negotiate changes within family functioning and adjust to a crisis situation. There may be a lack of family routines; this can encourage chaos in the household, which is often characterised by confusion, inconsistency and unpredictability. To maintain harmony in a family system, families need continuity and stability. This is provided by effective daily routines and rituals that provide a sense of predictability and comfort, thereby counteracting negative situations. Once a balance is achieved between flexibility and structure, families tend to function better (Black & Lobo, 2008; Walsh, 2012). In Greeff and Wentworth's (2009) study, a significant positive correlation was found between family adaptation, and family time and routines that promote adolescent and child responsibilities in the home. A positive relationship between family routines that promote parent-child togetherness and family adaptation was also identified. This suggests that predictable communication and interactions among family members assist in a family's resilience.

Lastly, seeking support from family, friends and neighbours in a family's community is regarded as an important factor in the domain of family organisational patterns (Walsh, 2012). Social support contributes to family resilience (Bishop & Greeff, 2015; McCubbin &

McCubbin, 1996). External (community and extended family support) and internal (family members) support have been frequently identified in the literature by a number of authors (Greeff & Du Toit, 2009; Greeff & Fillis, 2009; Greeff & Human, 2004; Greeff & Thiel, 2012; Greeff & Van den Berg, 2013).

External support is described as social support, support from family and friends, support within a household, financial support and community support, as well as seeking information from friends, health professionals, support groups and religious institutions (Deist & Greeff, 2015). Bishop and Greeff (2015) report that, if families are able to get support from their neighbours, friends and community, they are considered better able to adapt to their crisis. In addition, Bishop and Greeff (2015) found that support groups for families with a member diagnosed with schizophrenia were the greatest help in assisting with family adaptation. The support groups allowed families the opportunity to share information and connect with others facing the same or a similar crisis and experiences. The support group also aided them in understanding the illness better. These families were able to learn from each other's experiences. This helped them understand what was happening to the diagnosed family member and they learned how to handle situations better from others' experiences. The participants also mentioned that spiritual support received from members in their community aided in their ability to adjust and adapt to their crisis situation (Bishop & Greeff, 2015).

Internal support is described in the literature as support from family members, as well as family attributes (Deist & Greeff, 2015; Greeff & Thiel, 2012). Internal support was identified as being an effective coping mechanism used by families with a member with a chronic illness. Deist and Greeff (2015) reported that 63% of participants mentioned that maintaining a positive attitude in the home helped them to cope when caring for a family member with dementia. Similarly, Greeff and Thiel (2012) reported that emotional support amongst family members was an effective coping strategy in dealing with a chronic illness like prostate cancer.

In short, family organisational patterns encompass family flexibility (Jonker & Greeff, 2009), family connectedness (Greeff & Wentworth, 2009) and lastly social and economic support and resources (Bishop & Greeff, 2015).

Family communication patterns as a domain of family resilience (Walsh, 2012) were found in several studies to be a family resource; they will be discussed in the next section.

### *3.5.3 Family communication patterns*

McCubbin and McCubbin (1996) suggest that family communication comes in two forms. Firstly, positive and supportive communication, known as “affirming communication”. This is related to Walsh’s (2012) resilience framework and the essence of the third domain of family resilience. Affirming communication processes are characterised by clear messages, openness and collaborative problem solving (Walsh, 2012).

Communication has consistently been reported in the literature as a vital resilience resource that helps South African families to cope with a family member with a chronic illness (Deist & Greeff, 2015; Greeff & Thiel, 2012; Jonker & Greeff, 2009). During a crisis situation, importance is placed on communication that is open, clear and honest and that aims to show support towards family members who are going through a stressful time, or are directly affected by the crisis (Greeff & Human, 2004; Greeff & Lawrence, 2012; Greeff & Van den Berg, 2013). An affirming supportive style of communication is confirmed as a resilience factor that assisted families in adapting with an illness (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff & Thiel, 2012; Jonker & Greeff, 2009).

To sum up, the South African literature confirms that the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996), along with the Family Resilience Framework (Walsh, 2012), can be utilised to identify characteristics, strengths and resources that facilitate family adaptation in a South African context. Specifically, within Walsh’s (2003; 2012; 2016) framework, support was found for the identified three family resilience domains, namely (1) belief systems; (2) organisational patterns; and (3) communication.

The conclusion to the literature review will be discussed in the next section.

## **3.6 Conclusion**

The diagnosis of breast cancer can be regarded as a crisis and a stressful event for the whole family. Considerable research has been done on the ill individual (with breast cancer) and coping. Research on family dyads shows how the individuals and significant relationships are affected due to the breast cancer diagnosis. In addition, the current literature on breast cancer extensively discusses quality of life after a cancer diagnosis by focusing on different coping mechanisms. The many aspects of coping as found in the literature review point towards the

fact that families with a mother diagnosed with breast cancer have the capabilities to adjust and adapt to adverse life conditions (McCubbin & McCubbin, 1996; Walsh, 2012), although there has been limited research on how the family as a unit cope and adapt after breast cancer has been diagnosed.

From the literature review it is apparent that there is a large gap in the research surrounding resilience factors in families with a mother diagnosed with breast cancer. Only one other, similar study – on women living with lymphedema – was found in the literature search (Radina & Armer, 2004). However, as discussed previously, the Radina and Armer (2004) study is limited in its methodology and further research on families and factors that assisted the families to cope are suggested in their findings. Furthermore, no study of this nature could be found in the South African context, although there are other studies relating to resilience in families that experienced different types of adverse conditions in the South African context. These studies shed some light on possible family resilience factors that are present in families with a mother diagnosed with breast cancer.

Previous research (Lim, 2014; Radina & Armer, 2004) acknowledge that breast cancer survivors and their families may benefit from research focusing on what helps families to move beyond their vulnerabilities. Thus, utilising the Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin & McCubbin, 1996) can help to fill this gap within the literature on breast cancer and resilience in families. Therefore, the aim of this study was to identify and explore resilience qualities, characteristics, attributes and factors that are present in families with a mother diagnosed with breast cancer. The findings of this study could ideally be utilised by psychologists and hospitals specialising in breast cancer treatment. The findings can provide intervention and support guidelines for patients and their families to ease their adaptation when such a crisis strikes (Greeff & Thiel, 2012).

In the next chapter, the research method followed in the current study will be discussed in detail.

## CHAPTER 4

### METHODOLOGY

#### 4.1 Introduction

Chapter 4 discusses the methodology used to capture the data for this research study. The chapter begins with an explanation of the research design, in which both qualitative and quantitative data were employed in order to answer the following research question: *What resilience qualities or factors are present in families with a mother diagnosed with breast cancer?* This is followed by an explanation of the sampling strategy used, a description of the participants and of the methods of recruitment. Thereafter, the processes and procedures used during data collection are provided. This is followed by a detailed description of all the measures used in this study, as well as an overview of the quantitative and qualitative data analyses. Lastly, the chapter closes with a clarification of the ethical considerations, and the chapter is concluded.

#### 4.2 Research design

This study focuses on family resilience after a mother has been diagnosed with breast cancer. Family resilience is regarded as a relatively new area of interest in the positive psychology paradigm (Walsh, 2012, 2016). This cross-sectional study is partly exploratory, partly descriptive and partly confirmatory in nature (Cozby, 2009; Neuman, 2014; Terre Blanche, Durrheim, & Painter, 2006). A mixed-method study was employed, as it integrates both the quantitative and qualitative methodological approaches (Andrew & Halcomb, 2006). This research design is commonly known as the *convergent parallel design*, according to which qualitative and quantitative data are collected in a similar time frame and yet analysed separately (Fetters, Curry, & Creswell, 2013). Mixed-methods research is used to provide a more holistic approach to complex research questions by drawing on the strengths of quantitative and qualitative methodology (Andrew & Halcomb, 2006; Doyle, Brady, & Byrne, 2009; Fetters et al., 2013).

Quantitative methodologies are located in a positivist paradigm and seek to address research questions on generalisability, causality and the extent of effects, while the qualitative approach is aligned with a naturalistic perspective, as it seeks to understand how or why phenomena occur through descriptions of an individual's experience and can be used to develop theories

(Doyle et al., 2009; Fetters et al., 2013). By using two different methods to capture data, each method allows for comparisons, contrast and complementary findings to be drawn from each dataset (Creswell & Plano-Clark, 2007; Fetters et al., 2013). It thereby increases the validity of the research by seeking corroboration between quantitative and qualitative data (Doyle et al., 2009). Several South African studies on family resilience approve of using the mixed methods of both the quantitative and qualitative research approaches (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff & Thiel, 2012), as the qualitative results report on specific family resilience qualities, characteristics and nuances that the quantitative results may fail to identify. In addition, the mixed methods approach provides more in-depth answers and completeness to the research question, as some answers could possibly be missed when using only one method of data collection (Fetters et al., 2013).

Qualitative data collection preceded the quantitative data collection in order for the participants' responses to remain uninfluenced by the items in the quantitative measurements. The qualitative component was used to gain insight into the complex understanding of how a family coped, managed or survived after a mother's breast cancer diagnosis. I aimed to comprehensively understand family resilience, provided through rich descriptions that could bring unknown knowledge and new insights to the fore regarding this under-researched topic. In this regard, the findings could add more detail to the multifaceted dynamics of families in which a mother has been diagnosed with breast cancer and inform future research on breast cancer and families.

In conjunction with the qualitative data collection, quantitative data were collected by means of a biographical questionnaire, as well as the completion of seven self-report questionnaires. In this study, the strength of the relationships between family adaptation (viz. the dependent variable) and several independent variables (viz. communication patterns, community support, friend and relative support, coping skills, family time and routines, and family hardiness) were determined. The study therefore can be described as correlational in nature. However, no cause and effect conclusions can be inferred from this study, as attempts were only made to identify those variables that are significantly correlated with family adaptation and therefore can be considered family resilience qualities. The quantitative findings were used to further support the qualitative findings and to provide a more holistic account of family resilience in families with a mother diagnosed with breast cancer. The participants in the study will be discussed in the next section.

### 4.3 Participants and their demographics

After approval for this study was obtained from the Health Research Ethics Committee (HREC) of the Faculty of Medicine and Health Sciences, Stellenbosch University and from Tygerberg Academic Hospital, data collection commenced (see Appendices D and E). In an effort to keep the sample homogenous, only mothers who met the following criteria qualified to participate in this study:

- The mother was a patient at the Tygerberg Academic Hospital Breast Clinic.
- The mother was at least 18 years of age and lived with her family, or is part of a family.
- The mother had been diagnosed with stage II or III breast cancer at least one year previously.
- The mother was fluent in English or Afrikaans.

As the family was the unit of analysis in this study, a family was defined as two or more individuals who rely on each other for economical, physical and emotional support (Black & Lobo, 2008). This study aimed to identify and describe resilience qualities at a family level. Only the mother of a family was chosen to become a participant to represent her family.

The participants in this study were identified by means of purposeful, nonprobability convenience sampling. The purposeful sampling strategy was based on mothers who had been diagnosed with breast cancer (Terre Blanche et al., 2006). The sampling strategy was convenient, as participants were approached and selected based on their availability at the Tygerberg Academic Hospital Breast Clinic (Terre Blanche et al., 2006). Further on in this thesis, the Tygerberg Academic Hospital Breast Clinic will be referred to as the Breast Clinic. The ethical considerations of the study were carefully followed throughout the sampling procedure. The sampling procedure will be explained in detail in Section 4.5.

The first 11 mothers (out of the total of 103 participants) took part in both the qualitative (semi-structured interview) and the quantitative (completion of the self-report questionnaires) components of this study. According to Terre Blanche et al. (2006), the 11 participants in this study should have been adequate, as they suggest that a sample size of six to eight participants may be sufficient for a qualitative study. Data saturation occurred after the seventh interview and no new themes and no relevant insights came to light from the participants during the



interviews. However, four more interviews were conducted to ensure that no new information was revealed. These 11 participants contributed to the quantitative component of the study and completed the questionnaires along with all the other participants.

In total, 123 possible participants were approached at the Tygerberg Academic Hospital Breast Clinic on weekdays. Of these 123 mothers, 20 declined to take part in this study. Reasons given for why they declined to be interviewed or complete the self-report questionnaires were: (a) they felt anxious about their medical check-up while waiting to see the doctor and did not want to speak to the researcher; (b) they felt too tired to complete the questionnaires as they had been awake for many hours due to travelling from distant places for their doctor's appointment; or (c) they were feeling extremely ill and in too much pain to speak to the researcher.

A total of 103 datasets were completed and collected at the Breast Clinic. The families who were represented in this study were diverse in terms of their structure and size, and were not considered a stereotypical definition of the family. At the time of data collection, all the participants, with the exception of one family, indicated that their families had one or more adults (excluding the participant) living with them in their household. A total of 24% ( $n = 24$ ) of the participants indicated that they lived with one other adult in the household, while 57% ( $n = 57$ ) indicated that they lived with two or more adults and 18% ( $n = 18$ ) indicated that four or more adults lived together in their household. In most cases, the adults living with the participant were their adult children and these children's extended family.

In terms of ethnicity, 79% ( $n = 81$ ) identified themselves as being coloured, while 12% ( $n = 12$ ) were black, 8% ( $n = 8$ ) were white and 2% ( $n = 2$ ) were Indian. The majority of participants were Afrikaans speaking (80%;  $n = 82$ ), while 15% ( $n = 15$ ) were English speaking and 6% ( $n = 6$ ) spoke an African language. The participants' ages ranged from 23 to 83 years, with a mean age of 57.1 ( $SD = 12.33$ ) years.

Sixty-nine percent ( $n = 71$ ) of the women were diagnosed with stage II and 31% ( $n = 32$ ) were diagnosed with stage III breast cancer (see Section 1.5.2 regarding the definitions of stages II and III breast cancer). Of the total sample ( $N = 103$ ), 33 participants (31%) had been diagnosed with breast cancer one to two years previously, 21 participants (20%) had been diagnosed two to four years previously, 15 participants (15%) had been diagnosed four to five years previously, while 35 participants (34%) had been diagnosed with breast cancer five or more years previously.

With regard to the education level of the participants, four (4%) had received no formal education, 21 (21%) had completed some level of primary school (grade 1 to grade 7), 17 (17%) had completed grade eight, 26 (26%) of the participants had completed grade 10 and 24 (23%) had completed matric (grade 12). Merely 3% had attended tertiary education and received a diploma. The majority of the participants (77%;  $n = 79$ ) were unemployed and only 23% ( $n = 24$ ) were employed.

According to Statistics South Africa (2015), the average annual income for low-income groups is R19 200, which is equivalent to R1 600 per month. The South African government (2017) distributes an old-age pension from a pension fund or a disability grant for those in need and who qualify for it – currently both are R1 600 per month (South African Government, 2017). About half of the participants (50%;  $n = 51$ ) indicated that their families survived on government funding. About 36% ( $n = 37$ ) received an old-age pension from the government and 15% ( $n = 15$ ) received a disability grant from the government. The majority of the participants (53%;  $n = 54$ ) indicated that their families received less than R5 000 per month, 25% ( $n = 25$ ) of the families received more than R5 000 a month, and 22% ( $n = 22$ ) of the participants indicated that their families received R10 000 or more per month.

#### **4.4 Measures**

The qualitative data was captured by means of an interview and the quantitative data was captured by completing a biographical questionnaire and seven self-report questionnaires that measure different aspects of resilience. The participants could choose in which language they wanted to complete the questionnaires. All the questionnaires were available in English and Afrikaans. The questionnaires were translated from English into Afrikaans through the use of the translation-back-translation technique. All the questionnaires had been used previously in a number of South African studies (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff & Thiel, 2012).

The biographical questionnaire (see Appendix A) was administered to the participants to receive personal information for statistical analyses. The questions in the biographical questionnaire inquired about where the family lived (town or suburb), the participant's race, age, marital status, home language, highest level of education, whether or not she was currently employed, when she was diagnosed with breast cancer and what stage of cancer she was diagnosed with. In addition, the questionnaire inquired about her family composition, for

example the number of family members living with her, the family members' ages, gender and, lastly, the family's monthly household income. The qualitative measure will be discussed in the next section.

#### *4.4.1 Qualitative measure*

The qualitative data was captured by means of open-ended questions that were asked during a semi-structured interview using an interview schedule and probing questions (see Appendix B). The semi-structured interview followed after a biographical questionnaire had been completed. The participants were interviewed on a first-come, first-served basis at the clinic. This means that participants were interviewed as they came into the clinic in the morning, rather than on a scheduled basis. Of the 103 participants, only 11 were interviewed – data saturation occurred at this point. The interview preceded the completion of the quantitative measurements. This was to ensure that the data collected in the interview remained uninfluenced by the items in the questionnaires. Through the semi-structured interview I was able to gain a comprehensive understanding of how families with a mother diagnosed with breast cancer adapted to the news of the cancer diagnosis. This was achieved through rich descriptions of the participants' thoughts and feelings about the cancer diagnosis, and how their families adapted to the diagnosis (Braun & Clarke, 2013; Terre Blanche et al., 2006).

During the interview I asked the participant the following questions:

1. "How did everyday normal life change for your family after your breast cancer diagnosis?"
2. "What would you say helped your family to manage and adapt after your breast cancer diagnosis?"

The semi-structured interview is a common method of data collection, as the interaction between researcher and participant is informal and conversational in style (see Appendix B) (Terre Blanche et al., 2006). This allowed me to become acquainted with the participants and to build rapport. The conversational style of interviewing helped me to establish trust with the participants so that they felt comfortable to speak openly about their experiences. Open-ended questions assisted the participants to talk in depth about their experiences and feelings, and their thoughts about their family life after their breast cancer diagnosis (Braun & Clarke, 2013; Terre Blanche et al., 2006). Probing questions were used in instances where I wanted the

participant to elaborate on aspects that they had mentioned and where I required more detail. Each of the 11 interviews lasted between 30 to 40 minutes, followed by another 30 to 40 minutes to complete the self-report questionnaires. These 11 participants (with whom I conducted the interviews) were also required to complete the self-report questionnaires along with all the other participants in the study. The quantitative measures will be discussed in the next section.

#### 4.4.2 Quantitative measures

Seven self-report questionnaires were used to measure different components of the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996). This data was collected individually from each participant in an attempt to understand and identify resilience factors in families with a mother diagnosed with breast cancer. These questionnaires measure different aspects of family functioning and potential resilience qualities. The questionnaires were selected based on previous research and in accordance with McCubbin and McCubbin's (1996) theoretical model. The questionnaires were translated according to the back-translation technique (Hsiao & Boore, 2010) which have been used in previous South African studies. According to the Resiliency Model, the outcomes of family processes are presented in varying degrees of family adaptation and functioning. A family is considered to be resilient when showing higher levels of family adaptation. To measure family adaptation (the dependent variable), the *Family Attachment and Changeability Index 8 (FACI8)* measure was used, and this is discussed in the next section. Further on, the following questionnaires that measure potential resilience variables associated with family adaptation will be discussed: *Family Hardiness Index (FHI)*, *Family Problem Solving Communication (FPSC)*, *Relative and Friend Support Index (RFS)*, *Family Time and Routines Index (FTRI)*, *Social Support Index (SSI)*, and the *Family Crisis Oriented Personal Evaluation Scales (F-COPES)*.

##### 4.4.2.1 The scale measuring family adaptation

The *Family Attachment and Changeability Index 8 (FACI8)* was adapted by McCubbin, Thompson and Elver (1995) (Fischer & Corcoran, 2007) and is used in the present study to measure family adaptation. Family adaptation served as the dependent variable in accordance with the theoretical model of this study. FACI8 has two subscales and is designed to measure attachment and changeability in a family. The attachment subscale measures the degree to which family members have bonded with each other, or how attached they are to each other as

a family. This is measured by analysing the nature of communication with one another and how they spend time together. Families who engage with each other as a unit are considered more attached and more likely to confide in one another and feel confident in their solutions. An example of an attachment subscale item is 'Family members discuss problems and feel good about the solutions' (Fischer & Corcoran, 2007). The participant responds to 16 items on a five-point Likert-type scale, ranging from never to always, based on how applicable the statements are to the family and their functioning at the time. The changeability subscale measures the flexibility between family members in stressful periods, such as the family's ability to change roles and rules in the house to compromise when problems arise. An example of an item is 'Our family tries new ways of dealing with problems' (Fischer & Corcoran, 2007). Only the Total score (sum of the two subscales) is used throughout this study, and in the final analyses, to determine the level of family adaptation.

The attachment subscale has an internal reliability of .73, and the changeability subscale has an internal reliability of .80 (Cronbach's alpha) (McCubbin & McCubbin, 1996). The overall Cronbach's alpha of the FACI8 is .79. The FACI8 has a test-retest reliability with fair stability, with six- to 12-month correlations ranging from .26 to .48 (Fischer & Corcoran, 2007). The predictive validity of the measure is considered very good overall, showing significant effects among youth and parent scores in a completion and placement programme (Fischer & Corcoran, 2007). The FACI8 has been successfully implemented in a number of South African studies (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff & Wentworth, 2009). In the current study, internal reliability (Cronbach's alpha) coefficients of .69 and .71 were found for the attachment and changeability subscales respectively.

The following questionnaires were used to measure potential resilience variables associated with family adaptation:

#### *4.4.2.2 The scales measuring family resilience resources*

##### *4.4.2.2.1 The Family Hardiness Index (FHI)*

The FHI was developed by McCubbin, McCubbin and Thompson (1986) and is used to measure the internal strengths and durability in the family unit by evaluating characteristics of family hardiness when confronted with a stressful situation (Fischer & Corcoran, 2007). Family hardiness refers to a family's resistance to family stressors (McCubbin & McCubbin, 1996). It

is characterised by the family's approach to the stressor, as well as their views on change being a positive process necessary for growth, along with whether the family have an active approach to dealing with challenges (McCubbin et al., 1996). The FHI consists of 20 items and requires participants to respond to statements on a four-point Likert-type scale. The statements are rated as false, mostly false, mostly true or true.

The FHI has three subscales, namely commitment, challenge and control. The commitment subscale measures the ability of the family to work together to overcome stressful situations. An example of a statement measuring this subscale is 'We believe that things will work out for the better if we work together as a family' (McCubbin et al., 1996). Challenge refers to the family's ability to use innovative ways of handling stressful circumstances. A new way of handling stress is where an opportunity for growth may present itself through new experiences, rather than viewing change as a threat to the family's stability and security. An example of a statement in this subscale is 'We seem to encourage each other to try new things and experiences' (McCubbin et al., 1996). The control subscale measures the family's sense of being in control of their family life and not viewing themselves as victims of external events and circumstances. An example of a statements is, 'We realise our lives are controlled by accidents and luck' (McCubbin et al., 1996). However, only the total score of the FHI best predicts family hardiness as a buffer against stress (Fischer & Corcoran, 2007).

The internal reliability of this questionnaire is .82 and it has a test-retest reliability of .86. The FHI has a validity coefficient that ranges between .20 and .23. (Fischer & Corcoran, 2007; McCubbin et al., 1996). In this study, the internal reliabilities (Cronbach's alpha) were found to be .59 for challenge, .58 for control and .49 for commitment. An overall internal reliability coefficient (Cronbach's alpha) of .44 was obtained for the total score of the FHI for this study. This very low reliability coefficient should be taken into consideration when the results are reported and discussed.

#### *4.4.2.2.2 The Family Problem-Solving Communication Scale (FPSC)*

This measure was developed by McCubbin, McCubbin and Thompson (1988) and measures two dominant styles of communication in conflict family situations. These styles of communication are positive and negative communication patterns that influence problem solving and family coping strategies (Fischer & Corcoran, 2007). The FPSC aims to measure how the family respond and resolve conflict in moments of crisis. Participants are required to

respond to 10 items on a four-point Likert-type scale, namely false, mostly false, mostly true and true. The participant chooses an answer that she feels best describes her family's behaviour during an argument or conflict situation. The FPSC has two subscales, measuring affirming communication and incendiary communication. Affirming communication patterns have a calming influence that shows a caring and supportive environment. An example of an item in this subscale is 'we are respectful of each other's feelings'. Incendiary communication patterns are the opposite of affirming communication. They comprise a negative communication style that may aggravate an already stressful situation. An example of a statement in this subscale is 'we yell and scream at each other'. The FPSC model recognises the fact that all families have both negative and positive communication patterns (Fischer & Corcoran, 2007; McCubbin et al., 1996). It is important for family resilience and problem solving to measure both patterns of communication, as the total score of the FPSC indicates the context of communication in the family, where family issues and hardships are resolved and addressed (Fischer & Corcoran, 2007; McCubbin et al., 1996). The FPSC (total score) has an internal reliability (Cronbach's alpha) of 0.89 and a test-retest reliability of .86 (McCubbin et al., 1996). The affirming communication subscale has an internal reliability of .86, whereas the incendiary communication subscale has an internal reliability of .78 (McCubbin et al., 1996). In the current study, the following reliability coefficients (Cronbach's alphas) were found: FPSC (total scale) = .76, affirming communication subscale = .86, and incendiary communication subscale = .70.

#### *4.4.2.2.3 The Relative and Friend Support Index (RFS)*

The Relative and Friend Support Index (RFS) was developed by McCubbin, Larsen and Olson (1982). The RFS aims to measure the degree to which family members use the support from their friends and family to manage or cope with their crisis situation. It is an eight-item questionnaire and consists of a five-point Likert-type scale, ranging from strongly disagree, disagree, neutral, agree to strongly agree. An example of an item is 'seeking encouragement and support from friends'. It has an internal reliability (Cronbach's alpha) coefficient of .82 and a validity coefficient of .99 (McCubbin et al., 1996). In the present study, the RFS was found to have an internal reliability (Cronbach's alpha) of .80.

#### *4.4.2.2.4 The Family Time and Routine Index (FTRI)*

The FTRI was developed by McCubbin et al. (1986). This measure was developed to evaluate different routines and types of activities families engage in and the value they attribute to these

practices. Family routines and family time spent together are considered reliable sources of continuity, stability and integration within the family. This scale measures family routines at all stages of the family life cycle. The FTRI consists of 32 items. The participants are required to choose an answer on a four-point Likert-type scale. This first rating determines how applicable they currently find the statement to be in their family, ranging from false, mostly false, mostly true to true. The second rating is the level of importance of the previous statement helping to keep the family united (McCubbin et al., 1996).

The FTRI has eight subscales: *family management routines* emphasise having predictability and permanent routines in a family that encourage order within the household; *family time together* is family time that is spent together, including quiet time, special events and occasions like birthdays; *family chores routines* refers to fixed chores that are in place that promote the responsibilities of children and adolescents within the household; *child routines* are described as the importance of fixed routines for children that help promote independence for the children in the family; *meals together*, which is meals or mealtimes that are fixed in the family and promote a sense of togetherness; *couple togetherness* comprises routines that promote communication between couples; *parent-child togetherness* is communication between children and their parents, including spending time together; and lastly, *relative connections routines* refer to fixed routines that are in place with relatives of a family. In addition to the subscale scores, the FTRI yields a *family time and routines* (family total) score.

The FTRI has an internal reliability of .88 (McCubbin et al., 1996). The validity coefficients range from .19 to .34 with criterion indices of family functioning (McCubbin et al., 1996). In this study, the internal reliability (Cronbach's alpha) of the FTRI (family total) score was .78, and .90 for total importance. The following internal reliability coefficients were obtained for the subscales in this study: family management routines subscale = .18; family time together subscale = .64; family chores routines subscale = .83; child routine subscale = .32; meals together subscale = .48; parent-child togetherness subscale = .66; couple togetherness subscale = .56; and the relatives connection routines subscale = .41. Some of these coefficients are very low and the subscale scores should be handled with caution when the results are interpreted.

#### 4.4.2.2.5 *The Social Support Index (SSI)*

The SSI was developed by McCubbin, Patterson and Glynn (1982). This measure is used to determine the extent to which families are integrated into the community. The SSI aims to



measure the family's outlook on their community environment, whether they view their community as supportive and whether they use community resources for emotional and network support and for esteem (Fischer & Corcoran, 2007). An example of an item is 'living in this community gives me a secure feeling'. The SSI consists of 17 items that have to be rated on a five-point Likert-type scale. Participants respond to answers that best describe their family, ranging from strongly disagree to strongly agree. The SSI has an internal reliability (Cronbach's alpha) of .82 and the test-retest reliability was .83 (McCubbin et al., 1996). The SSI has validity coefficient of .40 (McCubbin et al., 1996). In this study, the internal reliability (Cronbach's alpha) of the SSI was .80.

#### *4.4.2.2.6 The Family Crisis-Orientated Personal Evaluation Scales (F-COPES)*

The F-COPES measure was developed by McCubbin, Olson and Larsen (1981). It was designed to identify problem-solving and behaviour strategies of the family during stressful periods and hardships (Fischer & Corcoran, 2007). The F-COPES consists of 30 items that focus on two levels of interactions. These two levels are between the family and their social environment, and between the individual and his/her interaction with the family system. It aims to measure the various coping mechanisms utilised by the family for external support during a crisis situation (Fischer & Corcoran, 2007). The items of F-COPES are rated on a five-point Likert-type scale. The scale ranges from strongly disagree to strongly agree (McCubbin et al., 1996). The respondent has to choose one of the answers that best describes his or her family during difficult times and when the family faces a problem. The scale consists of five subscales that are divided into two dimensions. The first dimension is internal coping skills; this includes two subscales – (1) passive appraisal, the extent to which the family accepts the situation and minimises their reactivity towards it, and (2) the extent to which the family make use of reframing a situation to make it more manageable.

The Cronbach's alphas of these subscales are .82 and .63 respectively (McCubbin et al., 1996). The current study obtained an internal reliability (Cronbach's alpha) of .50 for the passive appraisal subscale and .77 for the reframing subscale. The second dimension is external coping skills, which include three subscales that measure the extent the family: (1) acquires social support from relatives, friends, neighbours and extended family; (2) seeks spiritual and religious support; and (3) mobilises family members to seek and accept help from others. The Cronbach's alpha of these subscales are .83, .80 and .71 respectively (McCubbin et al., 1996).

The current study obtained the following internal reliability (Cronbach's alpha) coefficients for the three subscales: social support = .76, spiritual support = .67 and mobilising = .52.

#### **4.5 Procedure**

The study first went through ethical evaluation by the Health Research Ethics Committee of the Stellenbosch University Faculty of Medicine and Health Sciences (HREC protocol number S15/10/217). Thereafter, permission for this study was granted by the Western Cape Health Research Committee for Tygerberg Academic Hospital (application number WC\_2016RP2\_578). Data collection commenced at the Breast Clinic upon receiving a letter of permission from Tygerberg Academic Hospital, starting from May 2016 until the beginning of September 2016.

An Afrikaans-speaking Psychology Honours student with experience in administering questionnaires and I attended the hospital's Breast Clinic on weekday mornings. According to Dr K. Baatjes (personal communication, May 19, 2015), the head surgeon of the Breast Clinic, weekday mornings would be peak hours for identifying participants that met the inclusion criteria for the current study – possible participants are always scheduled for regular check-ups by their doctors on weekday mornings. This ensured that meeting times with the participants would be at a convenient place (the Breast Clinic) and at a time that they were available (Braun & Clarke, 2013). All of the qualitative and quantitative data were collected on the day of the participant's visit to the clinic. Data collection occurred before or after the patient's appointment with the doctor. The participant was not required to attend an additional day at the hospital for research purposes.

During our morning visits to the clinic, the research assistant and I would go through the medical files of each patient that were present to see the doctors for their check-up. These files have the patients' medical history from the first day they started receiving treatment at the Breast Clinic, as well as other important information that I needed, such as the date the patient was diagnosed with breast cancer, the stage of her disease, her age and the type of treatment she is undergoing at the Breast Clinic. If a patient's information in the file indicated that she qualified to participate in the study, the patient's name was noted down on a form and she then became a possible participant in the study.

The participants whose names were on the form for the day were approached individually in the waiting rooms of the clinic. Patients usually wait several hours to see the doctors. This allowed the research assistant and me plenty of time to identify potential participants and speak to them about the study. We asked them whether they would be interested to know more about the study before they made the decision whether or not they would take part in the study. Those patients that indicated that they were interested in the study were taken individually to a private room. The research assistant and I were assigned private rooms that we used for the duration of the data collection process. We (the research assistant and I) first asked a participant if she preferred to speak in English or Afrikaans. All the Afrikaans-speaking participants were invited to talk to the Afrikaans researcher alone in a private room. This was the same for the English-speaking participants, who were invited to speak to the English-speaking researcher alone in a private room.

The first few minutes were used becoming acquainted with the participant.. Then a brief description of the study was given to her in her preferred language. This allowed us to build rapport with the participant. We maintained a friendly and warm manner throughout the process, which allowed us to build trust with participants (Braun & Clarke, 2013). When the participant agreed to take part in the study, she was thanked for her willingness to offer her time. We further explained to her that she would not miss her appointment with the doctor when her name was being called out in the waiting room, as this was generally a major concern amongst the participants. We reassured all the participants that the nursing staff were notified that they were with us in our private rooms and that they would not miss their appointment.

Firstly, we explained to the participant that the study may not necessarily help her or her family directly, but it may in the future help other families in which the mother has been diagnosed with breast cancer. The voluntary nature of the study was highlighted to the participant, as well as that there would be no compensation for her time. We ensured her that all the information was confidential and that her identity will remain anonymous and safeguarded. I then presented a thorough overview of my study, including the aims and nature of the study as well as the participant's responsibilities and what might be expected of her throughout the research process. If she still agreed to continue, she was required to sign an informed consent form, which explained the details of the study (see Appendix C). At this point the participant was allowed the opportunity to ask any questions or to clarify uncertainties regarding the study. I requested permission to record the interviews with those participants from whom qualitative

data was collected. This was to ensure accurate descriptions of narratives for transcription and analysis at a later stage. After the informed consent form had been explained in detail and signed by the participant, I began filling out the biographical questionnaire for the participants (see Appendix A). Thereafter I started with the interview alone with the English-speaking participants, guided by a schedule consisting of open-ended questions. Probing questions were used appropriately to elicit in-depth answers on aspects I wanted them to elaborate on (see Appendix B). I explained to the participants that note-taking would take place during the interview and that they would serve questions and reminders for myself once she was done speaking. These field notes were partly used in the data analysis process (Braun & Clarke, 2013; Terre Blanche et al., 2006). Only 11 out of the 103 participants were requested for permission to record the interview. This was based on a first-come first-served basis, which means that they were interviewed as they came into the clinic and not on a scheduled basis. After the interview was completed the quantitative data collection commenced.

For the participants who did not participate in the interview, quantitative data collection started from this point until the required number of datasets of 100 or more was obtained. The participants who were not required to do the interview completed the biographical questionnaire, as well as the self-report questionnaires.

The majority of the participants asked for direct assistance with completing the questionnaires, as many could not read or found the language used in the questionnaires difficult, or they just felt tired, which might have an effect on the results. The meetings with the participants took between 40 and 60 minutes. After the interviews ended and all the questionnaires had been filled out, the participants were thanked for their time. At the end of each meeting the participants were reminded of free counselling support available to them if they felt emotional about any aspect surrounding the interviews or the questionnaires. Some of the women were emotional when speaking about their cancer diagnosis, as it was the first time that many of them had a chance to reflect on their family life after their breast cancer diagnosis. In cases where the participant felt emotional, I referred them to the free counselling services listed in the consent form (see Appendix C) provided by Reach for Recovery (R4R). This is a non-profit organisation that provides counselling services to any women undergoing breast cancer treatment at any state hospital. Despite some of participants feeling emotional, they reassured me that they would like to continue with the interview and complete the questionnaires. Many of the participants mentioned that it was a positive experience and that they felt grateful for the

opportunity to talk about breast cancer. At this time, final goodbyes were said and meetings were drawn to a close. All the questionnaires were checked by myself to see if the participant had responded to all the items.

The interviews were transcribed verbatim and saved on a password-protected computer. I immersed myself in the data by repeatedly listening to the interviews and reading over the transcriptions. In doing so, I familiarised myself with the data, which is a prominent aspect highlighted by Braun and Clarke (2006; 2013). Thereafter, the data was analysed according to Braun and Clarke's (2006; 2013) description of thematic analysis. The completed questionnaire responses were captured in a Microsoft Excel file for scoring and statistical analyses.

## **4.6 Data analysis techniques utilised**

### *4.6.1 Qualitative data analysis*

The qualitative data from the voice recordings of the interviews were transcribed verbatim. I repeatedly studied the transcriptions, allowing myself to become familiar with the experiences of the participants, noting when emphasis was placed on certain points, when the tone of voice changed and when pauses occurred (Terre Blanche et al., 2006). A qualitative data analysis technique known as thematic analysis was used in this study (Braun & Clarke, 2013; Terre Blanche et al., 2006). I implemented Braun and Clarke's (2006, 2013) method of thematic analysis due to the advantages of this technique. The technique allows for flexibility in identifying patterns, reporting on meanings and analysing themes found in the data (Braun & Clarke, 2013). The thematic analysis method is a six-step process, which I implemented manually throughout the analysis process.

The beginning stage of the analysis process is familiarisation with the dataset (Braun & Clarke, 2006). This was achieved by listening to the recordings and repeatedly reading through the transcriptions. I became completely immersed in the data and I started to fully grasp the depth of the content. This is where I first started to notice areas of interest and to conceptualise ideas that related to family resilience. I was actively engaged in this processes by continuously searching for patterns of interest and deeper meanings.

I noted down relevant ideas and identified interesting aspects in the dataset by generating initial codes from the content, which is step two of the process of thematic analysis. The initial codes

were the simplest component of processing the raw data meaningfully – coding comprises the building blocks of an analysis (Braun & Clarke, 2013). I placed the transcriptions in a table format, where the first column included the dataset and the second column included initial codes. Next to each point of interest or statement I generated an initial code and wrote down what it means. Examples of different codes are “support from family”, “faith in God”, and “optimism and hope”. Placing the dataset into tables made it easy to find relevant quotes at different stages (see Appendix H). The coding phase also included grouping relevant data together into similar codes.

The third phase began once all the transcriptions had been coded and collated. I examined the codes and started to combine them to create potential patterns and candidate themes. The themes captured the fundamental organising concept of similar codes, and from there further subthemes emerged. Reviewing and revising all the candidate themes formed part of the fourth step in the thematic analysis method. By refining and reviewing the candidate themes I constantly had to go back to the initial codes and what I had initially found to be important. At this time, I found a few candidate themes were in fact not themes and were absorbed into other initial candidate themes.

Following this came the fifth stage of the process, viz. naming and defining the themes. During this time, themes underwent ongoing analysis to yield definitions that clearly define a theme and, in short, capture the essence of the story being told through the dataset. Together, each final theme provided a rich and meaningful pattern found in the data that addressed the research question (Braun & Clarke, 2013). The sixth and final step in the process was the write up and analyse the final themes. This included counting how many participants has mentioned a theme, subtheme or sub-subtheme and presented in Table format (see Table 5.2) The report provides an interesting, coherent and logical account of the true stories found in the dataset (Braun & Clarke, 2013).

Validity, trustworthiness and authentic data are well-documented aspects of importance when attempting to pursue the validity and reliability of qualitative research (Neuman, 2014; Schwandt, Lincoln & Guba, 2007; Shenton, 2004). Validity in qualitative research represents the authenticity of the findings of the research study and that the way in which they have been reported is what is actually occurring in the real world (Neuman, 2014). Guba and Lincoln (1985, as cited in Schwandt et al., 2007) coined the term *trustworthiness*, which can be used to ensure validity in qualitative research to achieve authenticity and a balanced, honest and fair

account of people's experiences (Schwandt et al., 2007). Trustworthiness encompasses four basic components: *transferability*, *credibility*, *confirmability* and *dependability*. A short description of each components and how it was implemented in my research process is provided below.

Transferability refers to the degree to which the results of the research can be applied to other situations or other population groups (Schwandt et al., 2007; Shenton, 2004). Transferability was ensured through thick descriptions of the data through narratives (Schwandt et al., 2007). In addition, an in-depth description of the data collection procedure and the participants in the study was given herein. This was to ensure that future researchers fully understand the context in which this study commenced. In addition, this study utilised a biographical questionnaire (see Appendix A). This supports the extent to which the findings and key assumptions of the study can be transferred or applied to other population groups. Generalisability may be compromised due to the homogenous sample in this study. This may be recognised as a limitation of this current study.

Credibility refers to the congruency between reality and the findings of the study. Credibility can be improved by the quality of interviewing, such as using appropriate open-ended questions (Shenton, 2004). In this study, the qualitative and quantitative research methods focused on the same unit of analysis (the family) and addressed the same research question. This approach allowed for triangulation and validation by comparing the both quantitative and qualitative results. The interview preceded the self-report questionnaire to ensure that the participant's responses remained uninfluenced by the items in the questionnaires. Additionally, I used probing questions during the interview to elicit more in-depth answers from the participants. Credibility was further enhanced through a detailed report of the participants and the constructs that were studied. Prolonged engagement with the qualitative data and consistent observation allowed me to fully grasp the participants' perspectives and report the findings as accurately as possible. Lastly, I had numerous sessions with my research supervisor throughout the research process, during which we constantly discussed questions and concerns (Schwandt et al., 2007; Shenton, 2004).

Dependability refers to whether the current study can be replicated, and the consistency thereof. This issue was addressed through a detailed description of the research methodology, the participants, procedures and methods of data analysis herein (Braun & Clarke, 2013; Shenton, 2004; Terre Blanche et al., 2006). A detailed description ensures replication of this study for

future inquiries. Lastly, the concept of confirmability addresses the concerns of objectivity in a study (Schwandt et al., 2007; Shenton, 2004). To maximise my objectivity in this study, an external audit took place (Schwandt et al., 2007). Objectivity was achieved by several peer debriefing and external audit sessions with my supervisor, who examined the process of the results. The results and themes identified were constantly under scrutiny and were discussed with my supervisor through peer debriefing sessions.

#### 4.6.2 *Quantitative data analysis*

The quantitative analysis aimed to find the nature of relationships that exist between family adaptation (viz. the dependent variable) in families with a mother diagnosed with breast cancer and aspects of family resilience (viz. the independent variables). The quantitative analyses were conducted in collaboration with a senior statistician, Professor M. Kidd of the Centre for Statistical Consultation at Stellenbosch University. The data was analysed and processed using a Microsoft Excel datasheet file and a statistical software programme (Statsoft Incorporated, 2011). I collated and transferred each participant's ( $N = 103$ ) responses to the items of all of seven self-report questionnaires to a Microsoft Excel datasheet, which was prepared beforehand to score each of the measures. Three types of statistical analyses were conducted: Pearson product-moment correlations, one-way analysis of variance (ANOVA) and best-subset multiple regression analyses.

To assess the relationship between two variables, a correlation coefficient was used to quantify the nature and direction of the relationship between the variables (Cozby, 2009; Neuman, 2014; Terre Blanche et al., 2006). The Pearson product-moment correlation coefficient ( $r$ ) is a commonly used type of correlation and is interpreted when interval and ratio data are used (Cozby, 2009; Terre Blanche et al., 2006). In this study it was used to determine the strength and direction of the relationships between the dependent variable, family adaptation (measured with the FACI8) and the independent variables, measured by various scales and subscales (FHI, FPSC, RFS, FTRI, SSI and F-COPES), as well the biographical variables (Terre Blanche et al., 2006).

Secondly, one-way analysis of variance (ANOVA) was done to determine whether there were significant differences between the two subgroups found in the sample (Terre Blanche et al., 2006). These two subgroups are the single-parent families and two-parent families. The



ANOVA was calculated to determine if a significant difference could be identified between these different subgroups and the dependent variable, family adaption, as measured by FACI8.

Lastly, a multiple regression analysis (*R*) was done. This is a method of using several independent (predictor) variables in the prediction of a single dependent (criterion) variable (Terre Blanche et al., 2006). In the case of this research study, the independent variables were measured with different family measures (FHI, FPSC, RFS, FTRI, SSI and F-COPES), as well as with a selected few biographical variables, to predict the outcome variable of family adaption (criterion variable) as measured with FACI8.

The best-subsets multiple regression analysis technique was used in this study. This type of multiple regression was performed to determine the combination of independent variables that best explain and predict the level of adaptation in families with mothers who have been diagnosed with breast cancer (Terre Blanche et al., 2006). This technique has the advantage of analysing the ‘best’ 20 models and identifies the independent variables that are frequent and present throughout the analyses. This was achieved by a best-subsets multiple regression calculated using the measures of independent variables of resilience (FHI, FPSC, RFS, FTRI, SSI and F-COPES), including selected biographical variables. The biographical variables were informed by the qualitative data collection process by hints in the interviews, as well as by field notes taken during the interview section. The selected biographical variables included are: the employment status of the mother, mother’s stage of diagnosis, the number of adults living in the home, the mother’s level of education, the number of children in the household, and total monthly income.

#### **4.7 Ethical considerations**

Ethical clearance for this study was obtained and permission for this study was granted (see Section 4.5 and Appendices D and E). The critical purpose of research ethics is to protect the rights of the research participants (Terre Blanche et al., 2006). To ensure that no human rights were violated, three main ethical principles were applied in this research: (a) autonomy and a voluntary approach; (b) ensuring the right to personal safety and psychological well-being, and (c) respecting the participant’s right to privacy and confidentiality (Cozby, 2009; Terre Blanche et al., 2006).

After ethical approval was obtained for this study, data collection commenced at the Tygerberg Academic Hospital Breast Clinic. According to Dr K Baatjes (personal communication, May 19, 2015), breast cancer patients who fit the inclusion criteria for this study are seen daily in this particular clinic. Considering the sensitive nature of the study, the research assistant and I approached the women with extreme caution, care and sensitivity. We asked to speak with them in a private area where we explained who we are and gave them a detailed description of the study. They then had the opportunity to willingly and voluntarily agree or decline to participate in the study.

Once the patients had chosen to participate they became participants in this research study. Each participant was provided with an informed consent form (see Appendix C) that explained the study in detail. It included the purpose of the study, the aims and nature, the participants' roles and responsibilities in the study, and the risks and benefits of participation. All the ethical considerations were explained to each of the women who agreed to participate. They were made fully aware of confidentiality, privacy and psychological well-being. I requested permission to audio record interviews with the participants who took part in the qualitative part of the study. All participants were given the opportunity to make an informed decision on voluntary participation (Cozby, 2009). The participants were informed that they could withdraw from the study at any point should they feel uncomfortable or not wish to continue, without any negative consequences for them (Cozby, 2009). The participants were also given the chance to ask any questions regarding the study and to clarify any uncertainties they may have. If they consented freely, the participants were required to sign the informed consent form (see Appendix C) (Cozby, 2009; Terre Blanche et al., 2006).

There were no physical risks for the participants involved in this study. However, the research assistant and I were fully aware that some questions may cause emotional discomfort. The participants were required to talk about aspects that assisted their families to cope with the diagnosis of breast cancer. The diagnosis is personal in nature and thoughts and memories about the diagnosis from the past might be upsetting and could bring about some psychological distress. Free professional support was available if a participant became emotionally upset (see Appendix C). Three of the participants with whom I was in face-to-face contact became emotionally upset during the interview. However, the women reassured me that they were fit to continue with the rest of the interview – it was resurfacing memories of treatment and family life at the time of diagnosis that triggered their emotions. I again referred them to the informed

consent form where the contact details for professional support were indicated (see Appendix C)

During the interview process the participants were encouraged to think of positive aspects and strengths that assisted their family through the stressful time of being diagnosed with breast cancer. After completing the interviews and the questionnaires, several participants stated that the interview process was a positive experience for them, as the interview and questionnaires brought about feelings of gratitude for their family and the different role and responsibilities each family member played throughout their diagnosis. The participants reported a sense of empowerment in having recognised their family strengths. In fact, many of the participants stated that it was the first time they had spoken to someone about their family life since their breast cancer diagnosis. Several participants felt thankful for being given the opportunity to speak to someone about their family roles and responsibilities, as well as their needs, and found the research process to be of therapeutic value.

To protect the privacy and confidentiality of the participants, each participant was assigned a unique code, which was known only to me. Nevertheless, complete anonymity was not possible, as data collection entailed participants meeting face to face with the research assistant and me. However, the identities of the families represented in this study have been kept confidential.

At the end of each meeting with a participant, an official hospital sticker containing the patient's file number was attached to the participant's informed consent form. This was done to keep track of completed questionnaires, as well as for possible future reference and research, if ever new information was needed from the patients at the hospital.

All the completed questionnaires were stored in a locked cabinet in my supervisor's office, and the interview recordings and transcriptions were saved on my password-protected computer. This information will be stored for five years and will then be destroyed. In the final discussion of the results it will not be possible to connect the personal information obtained during the interviews from any participating family with particular information.

## **4.8 Conclusion**

This chapter provides a detailed description of the research method employed in my study. I have described the methodology in detail in order to ensure replicability in future research in the field of family resilience. The qualitative and quantitative methods were appropriately chosen and used in this study to uncover characteristics and aspects of resilience that are utilised in families with a mother diagnosed with breast cancer. The advantages of the mixed-methods research design were given, as well as a detailed description of the inclusion criteria, participants, methods of recruitment and procedures followed. The qualitative and quantitative measures used in this study were outlined, defined and given in detail. Each method of analysis and the procedures I followed in the analysis were outlined, along with the ethical concerns of the study. The results of this study will be reported on in the next chapter.

## CHAPTER 5

### RESULTS

#### 5.1 Introduction

This chapter is dedicated to reporting both the quantitative and qualitative results of this study. The results aim to answer the research question: *What resilience qualities or factors are present in families with a mother diagnosed with breast cancer?* The chapter begins with the qualitative results of the study. The qualitative data will be presented, consisting of all emerging themes, subthemes and sub-subthemes identified by the first 11 participants ( $n = 11$ , the point at which data saturation occurred). This was done through the use of Braun and Clarke's (2013) method of thematic analysis.

The quantitative results are reported thereafter ( $N = 103$ ). First, the Pearson's product-moment correlation coefficients of all the independent variables with the dependent variable (family adaptation as measured by FACI8 scale) will be reported. The results of an analysis of variance (ANOVA) are reported next to show whether there were differences between single- and two-parent families with regard to the dependent variable. This is followed by the results of the best-subset multiple regression analysis, which show the combination of independent variables that best predict the variance in the dependent variable (family adaptation). All data sets ( $N = 103$ ) from the participants were used to conduct the statistical analyses in this study.

#### 5.2 Qualitative results

The qualitative results provide an in-depth holistic understanding of family resources and strengths that helped the participating families to adapt and cope after a mother's breast cancer diagnosis. Through open-ended questions, the participants were asked to think about resources or characteristics that helped their family to cope with this crisis of the diagnosis of breast cancer. Interviews were terminated after 11 interviews, when data saturation occurred. Please note that the characteristics and resources mentioned by a participant (the mother) were her opinions of what she believed helped her family to adapt and cope after her breast cancer diagnosis. Please see Table 5.1 for an understanding of the participants' demographics, such as age, race, the number of years previously she was diagnosed, the stage of her cancer at the time of diagnosis and, finally, the number of people living in the household including the participant.

Table 5.1

*Demographics of the Interviewed Participants (n = 11)*

<b>Participant</b>	<b>Age</b>	<b>Race</b>	<b>No. of years since diagnosis</b>	<b>Stage</b>	<b>No. of people in the household</b>
1	54	Coloured	4-5 yrs	II	4
2	49	Coloured	1-2 yrs	III	4
3	63	Coloured	2-4 yrs	III	7
4	57	Coloured	4-5 yrs	II	6
5	44	Coloured	5 yrs plus	III	4
6	44	Coloured	4-5 yrs	II	3
7	40	Coloured	2-4 yrs	II	4
8	47	Black	1-2 yrs	III	5
9	35	White	4-5 yrs	III	4
10	51	Indian	1-2 yrs	II	5
11	58	Coloured	1-2 yrs	III	3

Through the extensive process of thematic analysis (Braun & Clarke, 2013), initial codes were generated, producing a collection of major themes (categories), subthemes and sub-subthemes that best captured the phenomenon of family resilience. Emerging categories, subthemes and sub-subthemes that identified as strengths and resources and are presented in Table 5.3. The themes are presented in a table to demonstrate patterns of themes found across the dataset through thematic analysis (Braun & Clark, 2013). Due to the complex nature of the research question the themes are not clear cut, interconnect and overlap in many ways. The results of the analyses indicated three main themes: a) Internal family attributes, b) external family resources and c) managing the illness.

Table 5.2

*Summary of Themes, Subthemes and Sub-Subthemes – as Family Resilience Attributes, Factors and Resources – That Emerged During the Qualitative Analysis (n = 11)*

<b>Categories</b>	<b>Description</b>	<b>Frequency</b>	<b>%</b>
<b>Internal Family Attributes</b>	A particular trait or emotion and characteristics ascribed to the family		
Spirituality	Religion, faith in god, attending church services, reading the bible and prayer	11	100
Belief systems	Hope for the future, a positive outlook, sense of being strong, confidence in overcoming the odds and a sense of being strong	11	100
Gratitude	Thankfulness, appreciation for life	4	36
Acceptance	Acceptance of the breast cancer diagnosis	5	45
Positive communication	Open, clear and appropriate communication for small children, affirmative and encouraging words	11	100
Family connectedness	Close-knit families who are able to rely on each other in times of need, mutual support and commitment	10	91
Family time together	Spending time together as a family, shared recreational activities, going someplace special	6	55
Flexibility	Being open to change in family routines and family functioning	5	45
<b>Family Resources</b>	A supply of support that enhances quality of life		
Social support	Emotional and physical support from family and friends	11	100
Family	Support from family members, extended family members and relatives	11	100

Table 5.2 (continued)

Categories	Description	Frequency	%
Community support	Support from a group of individuals	11	100
Religious support	Support from faith-based organisations and spiritual groups	10	91
Support groups	Support from similar individuals	1	9
Financial support	Support for coping required through money from close relationships	9	82
Family and friends	Monetary support for coping from family members and close non-kin relationships	6	55
Work colleagues	Monetary support for coping from place of work or close colleagues and bosses	3	27
<b>Managing the illness</b>	Strategies used to effectively care for the side effects of cancer treatments		
Managing the side effects of cancer treatments	Support from family members with controlling the side effects after chemotherapy, post-surgery, managing hair loss and dietary changes Controlling the side effects after chemotherapy, post-surgery, managing hair loss and dietary changes	10	91
Keeping to doctors' appointments	Regular scheduled check-ups and breast examinations from doctors	9	82
Information seeking	Finding information through media sources, books, internet or from the doctor	3	27
Avoiding treatment	Not talking about the illness to family, not seeking treatment	2	18

As can be seen in Table 5.3, three major themes emerged from the data: (a) internal family attributes, (b) external family resources and (c) managing the illness. The major themes, subthemes and sub-subthemes are recognised as resilience qualities that are comparable to quantitative measured variables, which will be elaborated on further in Chapter 6.



### 5.3 Internal family attributes

In the interviews, the participants described individual characteristics, traits and attributes that facilitated their families in the adaptation process following a breast cancer diagnosis. Although these characteristics and attributes were described by the mother from an individual perspective, she also described and explained them as shared qualities within the family system. Hence, the participating families made use of several internal family attributes that helped their family to adjust and adapt to a breast cancer diagnosis. An 'attribute' is a particular trait, emotion, characteristic or motive that is ascribed to an individual or a group (Reber, Allen, & Reber, 2009). Therefore, the first major theme is 'internal family attributes', and again it should be noted that subthemes and sub-subthemes are not clear cut and overlap with each other.

What follows are different types of internal attributes that emerged from the qualitative data analysis and were classified as subthemes and sub-subthemes. All the participants ( $n = 11$ ) mentioned at least one internal family attribute that assisted their family to adjust and adapt after a breast cancer diagnosis. The first subtheme is spirituality and consists of religion, faith in God, attending church services, reading the Bible and prayer. According to the participants, spirituality, religion and faith in God helped their families to adapt to the breast cancer diagnosis.

#### 5.3.1 Spirituality

A number of spiritual practices came to light during the difficult period following a breast cancer diagnosis. Spirituality, religion and faith in God were a prominent theme that were highlighted by all the participants ( $n = 11$ ). Participant 8 described how God and her Bible played an instrumental role in her family's coping process:

God, like for instance, you know that when you believe in God, everything falls smoothly. Through this, I know the doctors were the part of this, but the most thing it was God who helped me like that. You know that when I was, the day I was going to the operation, I always had my bible, but I don't tell anyone. So, one time was one o'clock then I opened my bible and read and I read Genesis and it says, "I will go with you and come back with you." So, to me it was like God is going with me in the operation room. And he will come back with me. And that exactly what happened. She [participant's sister] will tell you that, oh, there is nothing else but God that help us.

Reliance on God and religion played an important role for many of the participating families. Participant 1 stated that “God helped me through this”. In line with this belief, participant 11 expressed the strength she receives from praying to God and added:

I have never prayed so much in my whole entire life than when I found out I had cancer throughout the whole process. I think, prayed more than I ever prayed in my entire life since I was born, it’s just a strength that comes with prayer and that if you know if something is going to happen, then you know in your heart that everything is going to be taken care of and you know where you are going to. But, I actually told him [God] that you shouldn’t actually take me now, because David\* and Kelly\* [her children] are still too small.

It is evident that this mother drew her strength and created an optimistic attitude to cope with having breast cancer through prayer and her faith in God. Participant 2 added:

Prayer is the key I believe and it unlocks everything else. You just have to have a positive mind-set to balance everything out.

Activities such as prayer, reading the Bible, attending church services, hosting church services at their home, or family prayer time were deemed necessary by the participants. This promoted spirituality and helped the mothers, and therefore their families, to deal with their problems and adjust to their situation. Participant 11 further elaborated on her confidence in overcoming the odds of cancer:

They say God gives his greatest battles to his greatest soldiers, so that was one of the lines that kept me going because I thought to myself, you can’t be so full of shit and weak if God can put you through something like this, obviously you are going to overcome it. Or else he, there is obvious, there is always a reason, so that was the reason

### *5.3.2 Belief systems*

All of the participants identified a belief system used to cope with breast cancer in their family life during the interviews. The subtheme belief systems consist of hope and optimism for the future, confidence in overcoming the odds together as a family and a sense of being strong, and the sub-subthemes gratitude and acceptance. Participant 2 elaborately expressed her hope for the future and being strong for her family:

I decided, because of my husband and my two boys, that I'm running this battle for myself and for them because they are my hope ... There were times when I want to give up, because we're human, but I always remind myself, this power of my mind. I had the right to, to put that power in action and to speak it over myself that I'm healed. Tomorrow I'm going to be ok, today am I going to be 100% but I'm ok. You have the power within you to speak over yourself healing and there were many a day that I felt so, not only my body was sore and in pain, but I felt this battle is not worth running and then I re-focused my mind and tell myself, no you are a survivor, you are worthy, you are powerful, you are beautiful, you can make it. So don't give up, never give up and that's where I get my hope from.

Factors that promoted an optimistic outlook in families were: reliance and faith in God (the first subtheme), taking the illness one day at a time, thinking positive thoughts, families speaking positively about the illness, hope for the future and a sense of thankfulness . Participant 8 added how her family was positive for her and, in turn, she reassured them that she was not going to give up any time soon:

Yes, they [her family] had a hope for the future and I am telling them [her family] now you see, I know I am not going to die now, it's what I know.

Participant 2 added to the conversation of hope for the future and a sense of a 'not giving up' attitude. She expressed her sense of appreciation for each day and further explained how her family never gave up hope in her surviving the illness, despite her family's poverty-stricken circumstances:

We did not having anything, we know that we should never give up. Never give up hope, keep on believing, keep on trusting, keep on having faith. Things will work out. It might not today work out for you but try again tomorrow. Get up again, try again because it doesn't cost you anything to get up. So yes, my family, my husband, my two boys, we believe in never giving up.

#### *5.3.2.1 Gratitude*

The sub-subtheme gratitude was expressed by four (37%) of the participants who were interviewed. Gratitude consists of feelings of thankfulness and appreciation for life. Participant

3 further identified a sense of thankfulness even though her family did not really “talk much” and “tried to avoid the subject” about her illness, “because they didn’t want to see me [her] like that [sick and in bed]. But, today we can say thank you because I am much better, I feel much better than I used to”.

Participant 9, who is a mother of two young children, expressed her thankfulness for a loving and helpful husband during her difficult time following her cancer diagnosis. When asked about her experiences, she said the following:

And the it made me realise what James\* went through to keep me happy and I can’t, actually you can’t put it [into] words. You can feel it in your heart but you can’t put it into words. I just said, I thank God that I married him.

Feelings of gratitude and thankfulness were a common resource and theme that emerged from the interviews. Thankfulness was an internal family attribute that enabled the women in this study to cope with their breast cancer diagnosis. Participant 2 elaborately expressed her gratitude for each day:

Having a day of grace you realise that you must only live for that day and do the best you can for that day and love someone that day, hug someone that day, tell someone you love them that day, because that day is the day you have, because you are graced. You [are] still alive, you [are] still breathing and so tomorrow is another day. When you [are] alive, you do tomorrow differently, better and that’s how I had to cope.

#### *5.3.2.2 Acceptance*

A common feeling amongst the participants was a sense of acceptance of the illness. Of the mothers that were interviewed, 45% ( $n = 5$ ) suggested that acceptance of the illness improved their coping ability, and their family’s adjustment to the illness. The participants knew that there was nothing that could be done to change their situation. Interestingly, mother 10 stated that she “knew [she] had a lump but didn’t do anything about it”. She further added to the conversation through a rich description of accepting the illness and explained:

When they told me I had cancer I was not depressed. I believe it’s one of those things, I have to accept it. You know? I believe it’s just one of those things, I believe it’s maybe just your way of paying for your past, whatever you know. I just accepted it and moved

on. But mentally already, I knew I had a lump there, I already psyched myself up and said whatever is there I must handle, I just have to handle it, you can't do anything about it. You can't do anything if it's, like it was stage four you can't turn it to stage one, it is what it is. Accept it, do the treatment and just move on from there.

Participant 3 underwent a double mastectomy (removal of the breasts) after the cancer had spread to her auxiliary lymph nodes (see Figure 1.1). She said: "The first thing, I woke up and feel that they [breasts] weren't there. It was hard in the beginning but I made peace with that, I accepted it." Participant 4 said:

Well, I learnt to get used to my body. Accepted my illness, the ways that my body is changing. As [the] doctor said, "You are getting older and there is changes in your immune system and so on." The important thing about everything is that I just need exercise. Look after my health and so I kept going on.

### *5.3.3 Positive communication*

This subtheme focuses on effective communication between family members. All of the participants ( $n = 11$ ) stated that open, clear and positive communication assisted their family in the coping process. Open communication can be described as appropriate communication with younger children, along with honest communication with older children, especially older children who are better able to comprehend the enormity of the illness at the time of diagnosis. Participant 7 explained through a rich description her appropriate communication regarding breast cancer with her young daughter:

... she was about four, five years old. So explaining to a child that young what is going, you know about this germ inside there, or this bad thing inside that the doctor needs to take out. They ask questions like are you going to die mommy, you know? that sort of thing, it's like no-no, the doctor said everything will be fine I must just go and have this muti thing taken out, which is going to. If I leave it there it's going to grow into a big thing and then mommy will die, you know. And then, with the Chemo, and then like she is asking what is this medicine that's making you so sick? I thought medicine is supposed to make you feel better, and stuff. So this is just very special medicine okay, it's going to make you sick, so that you can be, get better.

Participant 2, a mother of two sons in their early twenties described how she was honest with her sons: “Everything I went through, during my chemo, I spoke to my family about.” “I told them how I feel, I was quite open to them because I wanted them to know.” In this way, open and honest communication is experienced as a practical family attribute that assists in coping following a breast cancer diagnosis. Participant 3 elaborated:

When I came home and I saw my son standing in my bedroom and he said to me, “Mom are you going to be okay?” and I said, “Yes! I’m going to be okay, I’m just going to be fine”.

A few participants shared how communication with relatives helped them cope through the diagnosis. Participant 4 stated how her sister gave her daughter supportive communication: “She will always ask my daughter how we are doing and [give] advice if there is needed to give advice and stuff like that.” Participant 10 explained that, during the course of her treatments, her children “have good communication, we speak, they [her children] are always in my room, all of them, sitting and chatting”.

Participant 7 added to the conversation regarding communication:

When it came to my turn to speak, I have got something that I needed to say that I needed to share with everybody. I was open with them completely, which in turn taught her [participant’s daughter] to do the same, you know? In that way, also we learnt to support each other through whatever we were going through, you see.

#### *5.3.4 Family connectedness*

The above excerpt from Participant 7 further displays how family communication is related to family connectedness, which promotes strong family bonds within a family. Family connectedness comprises strong family bonds with the participants’ own children, close relatives such as brothers and sisters, extended family members such as daughters-in-law, aunts and uncles, as well as spending time together as a family. Family connectedness was reported by 10 (91%) of the participants, who indicated that they had a strong bond with their children and described their family as “close knit”. These family relationships and family bonds were considered to be fundamental resilience qualities that contribute to adaption after a breast cancer diagnosis. Family connectedness also comprised spending family time together and

being able to rely on each other in times of need. Mother 10 stated that “family unity” and “being together all through it” helped her family cope with her breast cancer diagnosis.

Participant 2, who lives in poverty-stricken circumstances and is a married mother of two young adult men, revealed:

... basically, I think, what happened, we are very close, a close-knit family and I think the fact that we already had to endure such a lot in the past five, six years and because of what we endured, actually when I heard I had breast cancer, it wasn't that bad ... We know that with we went through [being poor], with breast cancer. It's just a case of being there for one another and my kids.

Participant 3 provided concrete evidence of family connectedness, closeness and spending time together as a family when she was asked how her family adjusted to her breast cancer diagnosis:

What can I say, they, start doing things like buying me a pair of slippers or buying me a chocolate or [pauses] they were always there, phoning me every day, if it's not my sons then it's their wives or my grandchildren. We were a family that grew so close. We are a close family ... I've got a good relationship with my daughters-in-law and all that and, as I say, it was hard for them seeing me go through this and they'll do something or just buy something or send me flowers or saying we pray for you ma, or send me a WhatsApp ... doing small things for me. Like just come in or just come and give me a hug and come say ma, let's pray together and you know that support? Even like, we had thanksgiving this past Saturday.

From the above excerpts it is clear that family connectedness is characterised by care, affection and love for each other. It is seen as an important resilience resource that was utilised by the families in adapting to the crisis after a breast cancer diagnosis. The participants were able to rely on their family connections in times of need, knowing that their family would be there for them.

### *5.3.5 Family flexibility*

Flexibility in the family functioning system was mentioned by five out of the 11 participants who were interviewed. It characterises being open to change in the family's already established patterns of functioning in the family system following a breast cancer diagnosis. Participant 1,

a mother of two, stated that her “daughter left school and took care of me at the time” of treatments. This family made a big decision that affected their daughter’s future by taking her out of her usual school routine. Sadly, this family had to make these difficult decisions due to not having other helpful resources within the family system at the time. Although they had no other resources, the family looked within their system and were able to make changes to their normal daily routines for the benefit of the family functioning and the mother’s well-being.

Participant 2 revealed that, before she was diagnosed with breast cancer, she used to “spoil our [her] children” and that they “depended on their mother [her] to do everything for them”. She further elaborated on how her family were willing to change roles and routines to help her following her chemotherapy treatments:

... you’d spoil your children and they are used to getting [spoiled]. When they come home or in the morning their beds are made, their lunch is put in, that kind of thing. So now obviously, they haven’t done those things for a while. Eventually they started to make their own food during this time they would [say], “Mommy, what do we do here?” “What must we do here?” and I would tell them what to do and eventually they started to make soup, they started to make scrambled eggs and bacon and stuff. So they could help themselves, fairly enough to, to, to eat. The only times I basically cooked was on a Sunday. I would cook a Sunday meal for them. So yeah they would help with their soccer, their soccer sportswear, to wash it, dry it and hang it out. They would take off the washing when there’s washing, so that helped a lot.

From the above excerpts from the interview it is clear that her sons were extremely helpful in everyday tasks after chemotherapy. The participant’s sons understood her needs at the time of treatment and were flexible in terms of taking on the extra workload that would normally be completed by her on a daily basis. It is clear how flexibility in the family system and being open to change in normal routines can affect the family’s ability to cope with a mother who has been diagnosed with breast cancer. The internal family attributes subthemes and sub-subthemes identified by the 11 participants in this study clearly assist in effective family coping. The second major theme, external family resources, is presented below.



## 5.4 External family resources

The second major theme that emerged from the qualitative data was ‘external family resources’. The findings demonstrate that the 11 participating families made use of three external family resources that can be categorised as social support (which can be broken down to include sub-subthemes support from family and friends and household help), community support (support from religious communities and support groups), and lastly financial support (from family and from friends and work colleagues). These resources assisted families in adapting to the crisis after a breast cancer diagnosis and enhanced their family’s quality of life.

### 5.4.1 Social support

The subtheme social support came to the fore and was identified by the all of the participants ( $n=11$ ) in this study. Social support comprises physical and emotional forms of support for the participant that helped them adapt to the crisis. The social support that emerged from the data was categorised into two sub-subthemes. These are support from family and friends, and household help, which will be discussed below.

#### 5.4.1.1 Support from family and friends

All the participants ( $n = 11$ ) acknowledged the vital role family support played in family adaptation to the crisis situation following a breast cancer diagnosis. The sub-subtheme family support can be described as support from family members, extended family members and relatives. The support is identified as physical and emotional support, as well as “having someone to talk to” during the difficult time after the breast cancer diagnosis.

Participant 10 explained how her sister and her children were her biggest support, she adds:

My sister was my biggest support, she lives in Durban. She would fly down every month and she did a lot of research and whatever I needed she would get me. Like if she knew I was going for chemo, I never, she knew what would be the symptoms, what would happen if you would get sores in your mouth, she would already go buy the ointment and keep it in case you get sick or Ensure [nutrient-rich protein shake], in case you don’t feel like eating so I had everything ...

Participant 10 felt reassured that her sister was there for her during difficult periods when she fell ill due to the side effects of the cancer treatments. She considered her sister to be her main support system, as she was readily available for her.

Participant 5, a mother of two young girls, provided concrete evidence of support from her family and work colleagues:

The entire family, they were shocked but they never was, they were never negative in front of me. They support me through the whole process. They was [were] there all the time and my church people was there [for me]. My work was there for me and there was always a [pauses] a support system. That's, the support system was, I can say 100% ... when I was home with my chemo, they were like, my husband, I can say my husband. He was like on top of me, make sure that I must, I must do everything that the doctor asked me, I was doing. And he made sure that everything is on time for me or I must do what I'm supposed to be doing. So he was actually my guidance and he was completely supportive in the sense of that, he will always ask me, is there something you need, is there something I must know, is there something that you must do. So he was, he was very, very helpful.

Participant 5 further elaborated on the support she received from her friend:

It's good to have a friend at times because you've got friends and you've got, you've got friends but I've got one friend and she support me every way, she was, when I cry she cry. When I feel the pain, she feel the pain. So her support for me was on top of it. When I'm not there then, while I was in hospital she will stop lunch time by, she will come see what do I need, bring me some food or lunch. In the evenings she will send food over for the kids or she will pack their breakfast boxes for the morning. So she's a friend in need, really, it's always good to have someone. It's always, not just your family.

Participant 9 provided concrete evidence of social support from her family:

Well, my husband was very supportive during the whole thing. He took care of the kids and took care of the house.

It is evident that social support from family and friends is beneficial in the adaption process following a breast cancer diagnosis and was deemed a vital resource by the mothers in this study.

#### *5.4.1.2 Household help*

The sub-subtheme household help points to a necessary resource that assisted families in adapting to the crisis of the mother diagnosed with breast cancer. Support within the household assists in the smooth running of the household, releasing the mother from certain duties and allowing her time to rest and recover. The participants mentioned a number of tasks with which they received help in the household, namely cleaning, cooking, grocery shopping, heavy lifting, cleaning of participant's wounds and preparing children for school. In the following quote, participant 9 explained support within the household after her mastectomy (removal of the breast):

So, I didn't want the stitches to come loose and bla bla bla, and the dressing, and all that stuff, so he [her husband] would bath the children, he would make supper, I would help in the kitchen. But I would, like mission around like an old lady, because I didn't want to work too hard. Yes, and he would do the dishes and he would clean the house and do the garden and, yes, dress the kids for school, and take them to school and fetch them from school and go get groceries because I couldn't drive for how many weeks... If we needed stuff from the shop he would go and get the stuff from the shop, then I will just WhatsApp him a list of what to get.

It is clear that, after the participant's mastectomy, her husband was extremely helpful in meeting everyday demands that she could no longer perform post-surgery. Her husband was her main source of support as he took on motherly duties while she was recovering from her surgery. In line with this, participant 8 added:

Because they have to wake up [at] five o'clock. Not to go school, five o'clock to help me. You see, do prepare everything for me. So, before they go to school you see. Sometimes when you are in chemo mos, sometimes you vomit as well. So they, when they come back from school they have to take me out of the bed and wash everything you see. Those things were so [hard] for me to see them struggling like that. Then I call

my sister, uh-huh, please jump in sisi, they are struggling sisi, because at least they are too young to experience those things you see.

All the participants highlighted the integral role of support with motherly roles within the household from either husbands, children or close relatives in coping with the family's adaptation. Since mothers received the support from family members, it is perceived as support coming from within the family system. Family members supported each other in times of need to ensure day-to-day tasks were managed effectively as described by Participant 7:

... they had to help out with quite a few things more you know. But eventually it became better, they helped up with a lot you know with sweeping and the, I had to give the kids more of the chores. The heavier lifting and all those things but it didn't change much because I tried to push myself a little bit harder every day.

An overlap occurs in the sub-subtheme *household help* and subtheme *family flexibility*. These two forms of family support and resources are very similar in nature. The difference between these two aspects is that, in the first instance (*household help*), the participant experiences support from family members directly related to the household who carry out motherly duties that she can no longer perform post-surgery or while recovering from chemotherapy. Many mothers stated that they could not use their arms for heavy lifting, cooking or cleaning. In the second instance (*family flexibility*), the participant is experiencing a change in family routines and the family are open to changes in the family's already established patterns of functioning. These routines may be related to children not attending school in order to help their sick mother or children and husbands helping around the house. Husbands and children would fulfil roles and functions that they would normally not participate in.

#### 5.4.2 Community support

The subtheme community support was identified by all of the participants ( $n = 11$ ). It is categorised into sub-subthemes religious community support and support groups.

##### 5.4.2.1 Religious support

Religious support was mentioned by ten (91%) of the participants. The sources of support from religious institutions included support from faith-based organisations, spiritual groups, priests and fellow churchgoers. Support from religious institutions provided families with a sense of

emotional support. Churchgoers and priests would visit the participants in hospital and pray with them before and after surgery. Some participants mentioned that priests and churchgoers would create prayer groups at their homes when they were too ill to attend church services. Participant 5 and participant 8 elaborated as follows:

What happened was is that we, they came normally for a prayer session. They visit me in hospital. It was my mum's church and my cell, because my mum was in another church and then she sent [the] message on to the friends and family from them. They come and visit. Just to let them know, "Visit my daughter, she's in hospital, she's going through this process, just keep her in your prayers". And then they come to hospital, they support me, they pray with me. They keep [me] in their thoughts. The same for my church people. We are doing all the same things. So, they were there, in and out. At the hospital and at my place (Participant 5).

Yes. They come pray and share the word. Sometimes they sometimes they bring muffins. Even when I am very sick they come and they sit there and pray and pray. And that even if I was not in a state to pray also but when I do hear them, that at least there are people who are in this with you, you are not alone in this, you will be healed (Participant 8).

Participant 1 further elaborated on her experience of support from the priest at the church:

... when I was diagnosed, I went to the priest. And the priest there spoke to me and he said I must go for chemo and I must go for the operations. And they came and they prayed for me and prepare everything for me.

According to participant 6:

Sometimes the people of the church come and they come and sit sometimes they come and pray and that is how they support me. Sometimes they come and clean my house, do my washing, make food.

An overlap occurs here in the subthemes *spirituality, religion and faith in God* and *support from religious institutions*, as they are similar in nature in the type of support received from religious contexts. The difference between these two subthemes is that, in the first instance (subtheme), the participants talked about their direct experience with spirituality and how their faith in God assisted their family in coping with breast cancer. The second subtheme relates to spirituality and faith in God in a social context, where people from the church would physically

pray with the participating families in their home, thus supporting the ill mother and her family in a time of crisis. Prayer groups and church services at the participants' homes promoted spirituality and provided a social avenue, which acted as a shield against crisis situations for the whole family. In contrast, only one participant (9%) mentioned the use of a support group in their community for breast cancer survivors. Participant 2 elaborated on her chemotherapy support group:

Yeah and then you sit in your group and you can make it work for you the day, by just saying hi to someone or asking how they doing and that's how we started a group that came every week ... We were seven ladies in the, in the X block ... And when we get together every third week we would like ask questions about, "how was your [week], you know? Your week after chemo? How did you cope? What happened to you?" That kind of questions so that we can see where we at and eventually we realised that we are actually all going through the same, similar.

#### *5.4.3 Financial support*

The subtheme financial support was highlighted by nine participants (82%). Financial support incorporates support from family members or work colleagues. This external family resource played an essential role in assisting families with adapting to a mother diagnosed with breast cancer. Six of the participants (55%) mentioned that they had received financial support from their family members, such as sisters or aunts and friends who are close non-kin relationships. This form of external family resources included monetary support for transport to the hospital, for check-ups, food supplies for their household and clothing. Participant 6 explained her experience of financial support from her family when she could not afford to pay for transport due to unemployment:

But, really my family did support me, until now they support me a lot. So I can't say they, my family is not there when I am sad or if I am sick or, every time when maybe at the time I didn't work neh, then I go to my sister and then tell her, I must go to Tygerberg tomorrow I don't have money. Then she make a plan ... neh, but now, Monday I phone her and I tell her, I didn't have money, but I must go Wednesday to Tygerberg, then she send me R200 to say, "Here! Go".

In line with this, participant 7 added how her husband's family supported her after her breast cancer diagnosis when she did not have any work or source of income:

His parents [her husband], his mother and his sister supported us, gave us a whole lot of things... Yes, they helped us out with furniture, clothes everything you know and family from my mother's side, also started helping us, you know. So there we got all the support and more support even, you know.

Three of the participants (27%) identified financial assistance from work colleagues and their place of work. Financial support included being paid for sick leave due to cancer treatments, or the office pooling together to buy food supplies for the participant's family. Participant 9 expressed her experience of receiving food supplies from her work colleagues after her mastectomy:

I felt so embarrassed, because that's who I am. I said to her Michelle\* [her boss], I don't understand why you bought, now I can't even move in the car because James\* just picked me up from my last op. And I said to Michelle\* you know, you didn't have to buy all this stuff, [her boss said] oh you are being stupid just take the stuff. And it was like seven eight bags full of food. It must have cost thousands of Rands, especially Woolies, But I asked her after everything was done, I said I am going to pay you back and then she said no, for what? It was a gift from me, my mother and my father and from the work.

The above excerpt demonstrates how this participant's family was supported by her work with food supplies post-surgery. Participant 5 further added concrete evidence of financial support from her work colleagues:

The support system from my work is [pauses] very, was very helpful. He helped me financially, 100%, whenever I was in need he helped me. So, I must say, yeah, so the support from my work. If it wasn't for my work and my family, I don't know.

Financial support was mentioned consistently throughout many of the interviews. The participants highlighted that help with food and transport aided their adaption and promoted family resilience after being diagnosed with breast cancer. Managing of the illness, breast cancer, within the family is reported in the next section.

## 5.5 Managing the illness

Managing the illness of breast cancer was the final main theme that was revealed in the qualitative data analysis. Cancer treatments often have uncomfortable, upsetting and sometimes unbearable side effects. Accordingly, managing the illness is important and is defined as strategies used to effectively care for the side effects caused by various breast cancer treatments, such as chemotherapy, radiation and surgery. Strategies highlighted by the participants can be broken down into four subthemes, managing the side effects of treatments after chemotherapy and surgery, keeping to doctors' appointments, and information seeking. These subthemes are reported on briefly in this section.

### *5.5.1 Managing the side effects of cancer treatments*

The majority of the participants (n = 10; 91%) expressed the importance of managing the side effects of breast cancer treatments as assisting their families in adapting to the crisis. An important factor highlighted by the participants was being prepared for the side effects of chemotherapy beforehand. As many as 91% of the participants experienced severe side effects from chemotherapy and surgery. There are a number of side effects following a series of chemotherapy treatments that families had to prepare themselves for.

A first major side effect mentioned by the participants was commonly referred to as the "red devil". The symptoms of the "red devil" were described by participant 7 as "extreme nausea, coughing, vomiting, diarrhoea" and "everything that comes out was red" in colour. The participants suggested that being prepared for the "red devil" and keeping the correct medications on hand helped alleviate the common side effects.

A second side effect experienced by the participants explained by participant 2 was that chemotherapy made her "feel old". A mother of two young girls, participant 7 revealed how "everything felt sore" and her "skin started to feel tight and dry". Participant 10 commented on how she "struggled with being fit" and expressed how her "bone structures were very sore". Participant 7 further added that she asked for direct assistance from her children with skin care, which included "rubbing oils on her back" and moisturising hard-to-reach places on her shoulders.



A third major side effect of chemotherapy, mentioned by nine participants (91%), was hair loss. In most cases the participants viewed their situation as manageable and described short hair as an adjustment for them and their family. The families prepared for hair loss by helping mothers or partners shave their hair off in advance. Afterwards, when actual hair loss occurred, it was not such a traumatic experience or a shock to the family. Participant 9 added:

All my hair was here until my sixth session, but it was like all residing back so it looked really bad. And so we sat in front of our microwave, but like those mirror finished microwaves and he took the shaver and he shaved everything off. So I looked like GI Jane.

Participant 9 revealed that her family showed support in managing the illness by offering to buy wigs when hair loss was a traumatic experience for the mother. Another aspect emphasised by participant 2 in managing the side effects of cancer treatments was the importance of “sticking to strict dietary requirements”. This included making healthier food choices while on chemotherapy to aid quick recovery.

It is interesting to note that participant 7 used the drug marijuana to manage the side effects of chemotherapy for the treatment of her breast cancer. She confessed to using the drug to combat nausea, assist in keeping food down and to create an appetite. She explained how marijuana helped improve her appetite after chemotherapy and throughout different treatment phases of cancer. She added:

Just once or twice a week I said to my friend ‘please bring me some more’ [marijuana]. Eventually what I did was I just every week like twice, three times a week you know when you do the plunger coffee? Threw some in there in hot water let it lay there for a bit until it’s cold enough and I drink a couple or two of it and that’s how it worked for me right through, you see, till the end of chemo. Even after that, you know, it took a while for the appetite to come back properly.

It is evident that marijuana assisted her during the severe side effects of chemotherapy. However, this out-of-the-ordinary method used to cope with the side effects of chemotherapy was mentioned by only one participant in this study.

### 5.5.2 Keeping to regular doctors' appointments

Nine of the 11 participants (82%) highlighted the integral role of keeping to regular doctors' appointments. Several of the participants stated that their families were supportive of them regularly visiting the doctor and would often miss work to be with them on the day of their appointments. Participant 9 explained how her husband was present for every doctor's appointment and chemotherapy session she attended at the hospital:

He would take the plasters off me and clean everything and bring me to the hospital, come with me for every chemo session, every radiation session, every operation he was there. When I was finished with the op he would be in the hospital, bringing all my stuff, looking after the kids when I was in hospital so, yes. He did all of that.

Regular scheduled check-ups with the doctor help to maintain the crisis caused by a breast cancer diagnosis. Participant 4 adds:

...they actually keep up to date with my dates when I'm having to see doctor. Go take my tablets... You have to stay up to date with everything because you've got a schedule mos.

An overlap occurs in the subthemes *social support from family members* and *managing the side effects of cancer treatments*, as these two forms of family support are very similar in nature. The difference between these two subthemes is that in the first instance (subtheme) the participant experiences support from family members within the household, with motherly duties, financial support, moral support at doctors' appointments and attending to her needs when extremely ill. In the second instance (subtheme), the participant is experiencing support related directly to managing the illness of breast cancer and support related to the severe side effects caused by cancer treatments. Another overlap exists between *family connectedness*, *social support from family members* and *managing the side effects of cancer treatments*. All three subthemes have similarities with regard to the nature of support received. For example, *family connectedness* refers to having a strong family bond, which also refers to support from members in times of need, and which is also similar to support from family members at doctors' appointments and cancer treatments.

### 5.5.3 Information seeking

Information seeking from the participants came to the fore from the qualitative data and was identified as a resource that assisted families in adapting to the initial news of a breast cancer diagnosis. Three of the participants (27%) highlighted the integral role of the internet as a source of guidance and information when they were unsure of what to expect following a breast cancer diagnosis. The participants explained that family members would look for information on the internet regarding their stage of breast cancer and treatment options. Other sources of information included asking the doctor for advice and guidance during the different cancer treatment phases. Participant 10 added:

... she [participant's sister] did a lot of research and whatever I needed she would get me. Like if she knew I was going for chemo, she knew what would be the symptoms.

Participant 4, a much older mother with married children, stated:

My daughters, they were very, hoe kan ek nou sê, behulpsaam. Hulle was baie behulpsaam gewees en they really see to my needs. They were very concerned, like “mommy what can we get for you” or they will Google what can that person help with the cancer. And they go in, they interested in, they found books for me.

In this section of the qualitative results, several themes subthemes and sub-subthemes have been presented that highlight the attributes, resources and strategies used by families to manage and adapt to the crisis after a mother has been diagnosed with breast cancer.

## 5.6 Quantitative results

### 5.6.1 Demographic results

In this study, all participants ( $N = 103$ ) were required to complete a biographical questionnaire (see Appendix A). Pearson product-moment correlations were calculated between the FACI8 scores (family adaptation) and the different demographic variables. The only demographic variable that had a significant correlation with family adaptation was the level of education of the participant ( $r = .20$ ;  $p = .04$ ). This means that the higher the level of education of the mother, the better the family's adjustment and adaption following a breast cancer diagnosis.

### 5.6.2 Correlations between family adaptation and the independent variables

For the purposes of this study, Pearson's product-moment correlation coefficients were calculated to identify the independent variables that had a significant correlation with the dependent variable, family adaptation (as measured with FACI8). As this study only attempted to identify resilience characteristics present in the target families, cause-and-effect conclusions cannot be inferred in the presence of significant correlations between variables.

The represented families ( $N=103$ ) were split into two groups according to the marital status of the mothers. The first subgroup was two-parent families ( $n = 60$ ). These included families in which the mother was married, living with an intimate partner, or cohabitating. The second subgroup ( $n = 43$ ) is described as single-parent families and includes families in which the mother had never been married, was divorced, or widowed. The correlation coefficients for the single-parent subgroup ( $n = 43$ ) and the two-parent subgroup ( $n = 60$ ) were calculated separately to determine whether similar (resilience) variables were associated significantly with family adaptation for the two subgroups. Significant positive correlations ( $p < .05$ ) were considered as family resilience qualities or resources. The correlation coefficients ( $r$ ) and their corresponding p-values are presented for both subgroups in Table 5.3 on the following page.

Table 5.3

*Pearson's Product-moment Correlations between the Independent Variables and Family Adaptation as Measured by the FACI8 (N = 103)*

Variable	Single-parent (n = 43)		Two-parent (n = 60)	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
Family Hardiness (FHI Total)	.70	<.01**	.55	<.01**
Family's sense of dependability, internal strength and ability to work together (FHI Commitment).	.48	<.01**	.39	<.01**
Family's efforts to be active, innovative, open to experience new things and to learn (FHI Challenge).	.62	<.01**	.32	.01**
Family's sense of being in control of family life (FHI Control).	.47	<.01**	.39	<.01**
Family problem-solving communication patterns (FPSC Total) – style of family communication during crises.	.49	<.01**	.71	<.01**
Family's affirming, positive and supportive communication patterns (FPSC Affirming).	.58	<.01**	.73	<.01**
Family's incendiary, inflammatory and negative communication patterns (FPSC Incendiary).	-.32	.03*	-.63	<.01**
Relative and friend support (RFS Total) – family's use of relative and friends as a coping mechanism.	.13	.41	-0.10	.42
Social support (SSI Total) - Community support and the utilisation of community resources.	.27	.07	.41	<.01**
Family Crises Oriented Personal Evaluation Scale (F-COPES Total) – problem solving and behavioural strategies used by families in times of hardship.	.52	<.01**	.14	.29
Social support – family's ability to actively seek support from friends and neighbours (F-COPES - Social support).	.22	.15	-0.05	.69
Redefining negative situations in a positive way, the family's capabilities of reframing situations as more manageable (F-COPES Reframing)	.56	<.01**	.19	.15
Spiritual support – Family's ability to actively seek spiritual support (F-COPES Spiritual support)	.41	<.01**	.17	.20

Variable	Single-parent (n = 43)		Two-parent (n = 60)	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
Family Mobilization – ability to seek out community resources & accept help from the community (F-COPES Mobilising community resources).	.24	.11	.05	.72
Passive Appraisal – passive acceptance of problematic issues to minimise reactivity (F-COPES: Passive appraisal)	.28	.07	.28	.14
Family’s routines and activities (FTRI Total)	.28	.18	.36	0.02*
Importance attributed to family time and routines (FTRI Importance).	.12	.50	.05	.71
Family’s importance on creating predictable routines to promote children’s and teen’s sense of independence and autonomy (FTRI Child routines).	-.21	-.31	-.10	.53
Family’s routines to encourage communication between spouses (FTRI Couple togetherness).	-.24	.54	.45	<.01**
Family’s attempts to create predictable routines to encourage togetherness through mealtimes (FTRI Meals together).	.39	.01*	.16	.22
Family’s emphasis on creating predictable communications between parents and children (FTRI Parent-child togetherness).	.37	.08	.20	.25
Family’s emphasis on family togetherness including special events, quiet time and family time (FTRI Family togetherness).	.51	<0.01**	.52	<0.01**
Family’s attempts to create predictable routines to encourage a meaningful connection with relatives (FTRI Relative’s connection).	.06	.71	-.08	.57
Family’s emphasis on establishing predictable routines to encourage children’s responsibilities in the home (FTRI Family chores).	.33	.30	-.07	.97
Family’s attempts to promote family organisation to uphold family order in the home (FTRI Family management).	-.08	.67	.45	<0.01**

\*  $p \leq .05$ \*\*  $p \leq .01$

As shown in Table 5.3 there are eight independent variables that have a significant positive correlation with family adaptation for both the single-parent subgroup and the two-parent subgroup. These independent variables are: family hardiness, family commitment, a family's efforts to be open to experience new things, a family's sense of being in control of family life, family problem solving and communication patterns, affirming communication patterns, incendiary communication patterns, and family routines that promote togetherness.

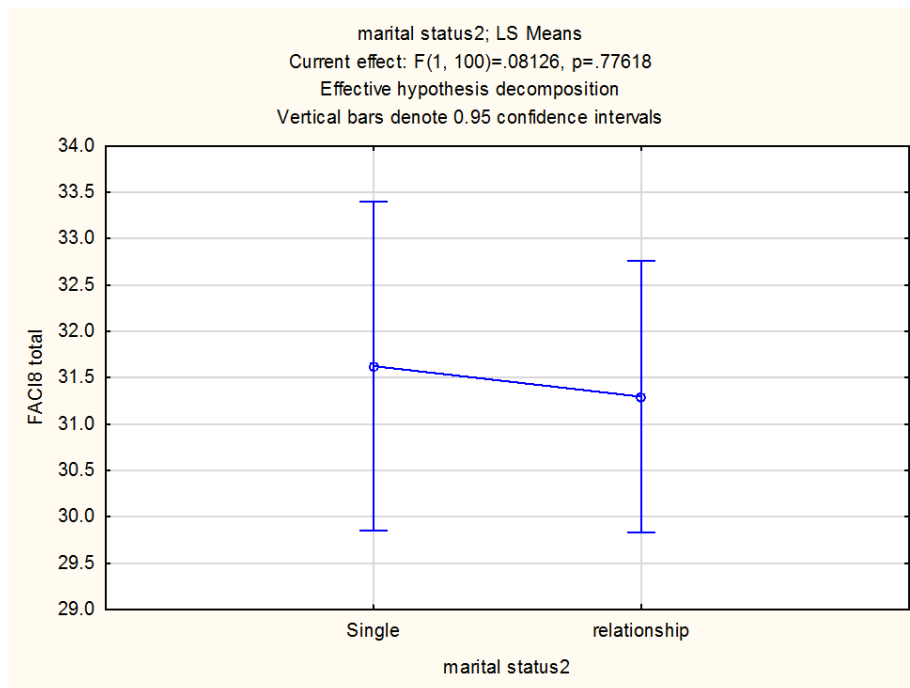
It is interesting to note that, in both subgroups, the independent variable that showed a significant negative correlation with family adaptation was the family's inflammatory and negative communication patterns. In this instance – from the mother's perspective, negative styles of communication during a crisis situation were negatively associated with family adaptation and therefore were not considered as a family resilience quality.

As seen in Table 5.3 there are five independent variables that have a significant positive correlation with family adaptation that were not the same for the single-parent subgroup and the two-parent subgroup. Firstly, the independent variable family social support, which refers to the family's ability to acquire emotional and network support from community resources, was significantly correlated with family adaptation for two-parent families only. A second significantly correlated coping strategy found in the single-parent subgroup, but not in the two-parent subgroup, was the family's ability to actively seek spiritual support. Furthermore, family time that promotes family routines and activities had a significant correlation with family adaptation for the two-parent subgroup ( $r = .36, p < .02$ ), but this correlation was not significant for the single-parent subgroup ( $r = .18, p < .18$ ). In the single-parent subgroup, routines that encourage family togetherness, such as mealtimes, had a significant correlation ( $r = .39, p < .01$ ) with family adaptation, but this correlation was not found to be significant for the two-parent families subgroup. Lastly, the only other positive correlation found with family adaptation was family routines and activities that promote couple togetherness for the two-parent subgroup ( $r = .45, p < .01$ ), which was not significant for the single-parent subgroup.

With regard to the families represented in this study ( $N = 103$ ), a number of independent variables found in Table 5.3 that best predict family adaptation (FACI8 Score) for the single-parent and two-parent subgroups are true for the sample size as a whole group. These independent variables include: the family hardiness index (FHI Total), family's problem-solving communication patterns (FPSC Total), family crisis orientated personal evaluation scale (F-COPES) and family time routine index (FTRI Total).

## 5.7 Levels of family adaptation in the two subgroups

An analysis of variance (ANOVA) was done to determine whether there was a difference between the marital status subgroups (single or in a relationship) with regard to the level of family adaptation (FACI8 Scores). The relationship between family adaptation and marital status is presented graphically in Figure 5.1.



*Figure 5.1.* A graph showing the mean scores of the levels of family adaptation in single-parent and two-parent families.

As seen in Figure 5.1, there was no significant difference between the two subgroups with regard to their families' level of family adaptation ( $F(1, 100) = 0.81, p = .78$ ). Thus, from the participants' perspective, it seems that marital status (two-parent family or single-parent family) is not related to family adaptation in families in which a mother has been diagnosed with breast cancer. A possible reason for this result is that many single-parent families in this study were not confined to the general definition of a single-parent family household, because all participants indicated that they had one or more other adults living with them in their household.



## 5.8 Multiple regression analysis

A best-subsets multiple regression analysis was done to determine the combination of independent variables that best predict the level of family adaptation in families with a mother diagnosed with breast cancer. As there were no statistically significant differences between the two subgroups with regard to level of family adaptation (see Figure 5.1), this analysis was done on the total sample ( $N = 103$ ). The results of the regression analysis are presented in Table 5.4.

Table 5.4

*Multiple Regression Analysis: The Best Combination of Predictor Variables for Family Adaptation in Families with a Mother Diagnosed with Breast Cancer ( $N = 103$ )*

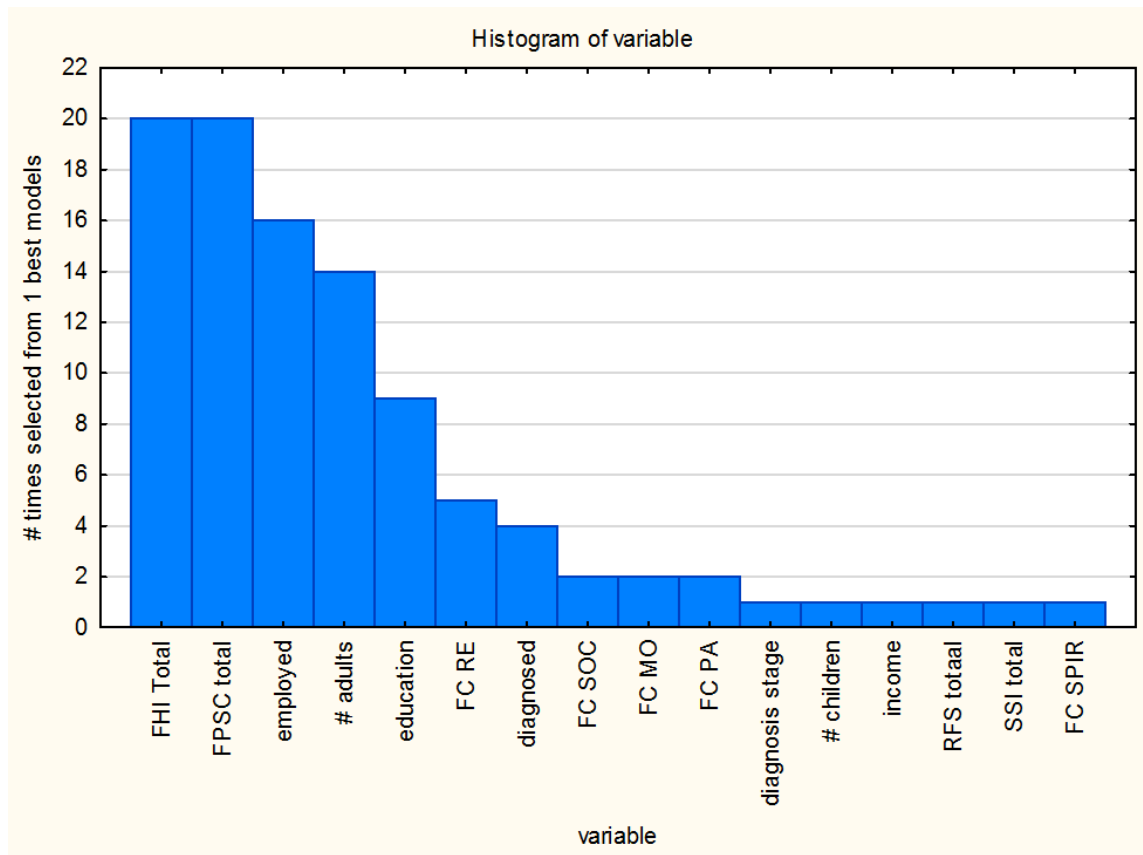
Variable	$\beta^\dagger$	$t$ (92)	$p$
Family hardiness (FHI Total score)	0.35	3.72	< .01**
Family's overall problem-solving communication patterns – a family's style of communicating in times of crisis (FPSC Total score)	0.42	4.57	< .01**
Employment status (employed or unemployed)	0.14	1.84	.07
Number of adults living in the home	-0.13	-1.77	.08
Level of education of the mother	0.11	1.48	.14

\*\*  $p \leq .01$

$\dagger$  Standardised coefficients

The two significant independent predictor variables, as seen in Table 5.4, are family hardiness (FHI total score) and the family's overall problem-solving communication patterns (FPSC total score). Although the relationship between the three demographic variables and family adaptation are statistically non-significant, these independent variables were included by the best subsets method. Two independent variables were significant, at 10% ( $p < .01$ ), namely employment status and number of adults living in the home. They also frequently occurred in the top 20 models.

The best subsets as determined by the multiple regression analysis had a multiple R value of .72, which indicates a significant positive correlation between the true FACI8 scores and the estimated FACI8 scores, as predicted by the independent variables. The multiple R<sup>2</sup> value of .52 indicates that the independent variables listed in Table 5.2 account for 52% of the variation in the FACI8 scores. Below, Figure 5.2 illustrates the number of times each independent variable appeared in the 20 best models.



*Figure 5.2.* Histogram illustrating the number of times independent variables are present in the best 20 models.

The histogram (Figure 5.2) shows the number of times that an independent variable was identified as a predictor variables of family adaptation in the best 20 models. Only two independent variables featured in the 20 best models. These two variables are family hardiness and family problem solving and communication patterns. This validates that family hardiness, a family's internal strengths and durability when confronted with a stressor, as well as family problem solving and communication patterns, are strong predictors of family adaptation in families with a mother a diagnosed with breast cancer. In addition, the demographical variable

employment status of the participant (employed or unemployed) was identified in 16 of the 20 best models, the number of adults living in the household featured in 14 of the best 20 models and, finally, the mother's level of education was represented in nine of the best 20 models. This, to some degree, warrants the inclusion of these variables in the best model and ties in with the corresponding regression *p*-values, which were close to being significant, even though they were not significant at the 5% level.

## **5.9 Conclusion**

In this chapter both the quantitative and qualitative results are reported. Through the use of both methods, family resilience qualities, attributes and resources utilised by families with a mother diagnosed with breast cancer could be identified. The two methods of data collection and the corresponding analyses provided unique and complementary results that contribute towards our understanding of family resilience qualities in families where a mother has been diagnosed with breast cancer.

In the next chapter, these results and findings will be discussed in combination with previous research and theories of family resilience.

## CHAPTER 6

### DISCUSSION, LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS

#### 6.1 Introduction

The primary focus of this research study was to identify and explore resilience factors or characteristics that are present in families with a mother diagnosed with breast cancer. This study sought to answer the following research question: “*What resilience qualities or factors are present in families with a mother diagnosed with breast cancer?*” This study focused on families with mothers who had been diagnosed one to five years previously with stage II or stage III breast cancer. The mothers of the families were receiving treatment at the Breast Clinic at Tygerberg Academic Hospital.

In order to identify family resilience characteristics and resources associated with family adaptation, the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1996), combined with the Family Resilience Framework (Walsh, 2012), was operationalised for the purpose of this study. This chapter is dedicated to a discussion of the results of the current study in comparison with the theory and relevant literature and the findings of previous empirical studies in the field of family resilience.

This chapter begins with an explanation of a stressor event that causes a crisis that negatively affects family adaptation. This study confirms a family’s ability to overcome a stressor event according to two resilience theories within the sphere of positive psychology (McCubbin & McCubbin, 1996; Walsh, 2012). Based on both the qualitative and quantitative findings, the identified characteristics and factors associated with family resilience in families with a mother diagnosed with breast cancer are discussed in the sections to follow. Due to the complex and multifaceted nature of resilience resources, these factors will not follow the order as presented in the previous (results) chapter. The discussion of the results will take place using the three family functioning domains as presented in Walsh’s (2012) Family Resilience Framework as reference points, in the following order: (a) family belief systems, (b) family organisational patterns, and (c) family communication patterns. It is organised in this way as the results of the current study (qualitative and quantitative) can fit into Walsh’s Theory (2012). This chapter will conclude with the limitations of this study, recommendations as points of departure for future research, and a final conclusion.

## 6.2 The stressor event or crisis situation

When a mother is diagnosed with breast cancer it is considered as an unforeseen, non-normative, significant stressful event for a family and, therefore, indeed a family crisis (Love & Lindsey, 2010). Ongoing strains that accompany a cancer diagnosis may drive a family into a poor state of family functioning. A breast cancer diagnosis can disrupt family functioning, drain family resources and threaten the stability of the family system (Patterson, 2002; Walsh, 2012). It is possible for families to exist in a state of crisis due to the disruption caused by the diagnosis of a chronic illness (Patterson, 2002; Walsh 2012). Alternatively, the stressful event and crisis of having a mother diagnosed with cancer may propel the family to form new capabilities and stronger ways of functioning together as a family (Patterson, 2002).

Resilience studies aim to shift the focus from the crisis event towards strengths, resources and attributes that families have available to them, allowing them to emerge more resourceful despite the negatives (McCubbin & McCubbin, 1996). McCubbin and McCubbin (1996) and Walsh (2003, 2012) state that families naturally possess the potential to overcome adversity and that, over time, families acquire the necessary skills and abilities to achieve adaptation to a stressor. The factors that assisted families to overcome this crisis will be discussed further on.

The stressor event of a diagnosis of a chronic illness such as breast cancer brings about several new concerns and issues for a family to take into consideration. A qualitative result, ‘managing the illness’ (or stressor event), was a main theme that emerged from the data (see Table 5.2). This theme included: keeping to regular doctors’ appointments, asking doctors for advice and guidance, sticking to strict dietary requirements, making changes in household routines, familiarising themselves with new treatment procedures – such as chemotherapy – as well as being prepared for the side effects of breast cancer treatments beforehand. These concerns or issues surrounding a breast cancer diagnosis may not have been thought about by the family before the diagnosis occurred. Families have to adjust and adapt to the illness, along with the changes the illness brings to the family system. Managing the illness revealed that the crisis situation of having a mother diagnosed with breast cancer was deemed manageable by the participants.

The cancer diagnosis was considered a maintainable task by keeping to regular doctors' appointments and check-ups. The participants felt that regular doctors' visits and medical examinations assisted their families in adapting to the diagnosis, as they offered the opportunity to ask doctors for advice, information and guidance about the illness (see Table 5.2). Secondly, pre-empting the side effects of chemotherapy, such as hair loss or tried and tested medications for nausea, assisted participants and their family in adapting to the severity of the illness (see Table 5.2). Some participants mentioned sticking to healthy and strict dietary requirements, while one mother confessed to using the drug marijuana. She indicated that it assisted her and her family in the recovery process following her breast cancer diagnosis. The relationship between managing the illness (stressor event) and the side effects could not be validated quantitatively, as there currently is no scale to measure this aspect as a potential family resilience quality (McCubbin & McCubbin, 1996).

The present study confirmed previous research that qualitatively identified the management of a chronic illness or stressor event as a resilience resource in families where a crisis of a similar nature had occurred (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff & Thiel, 2012; Jonker & Greeff, 2009). A family resilience study on families living with a family member with a mental illness proposed that acceptance and understanding of the patient's illness, or anticipating symptoms of the illness in advance, helped families to adapt to their stressful situation (Jonker & Greeff, 2009). In another study, managing the symptoms of dementia through tried and tested medication, administration and information seeking from medical professionals was considered crucial to family adaptation (Deist & Greeff, 2015). In the same way, Greeff and Thiel (2012) found that information seeking and support from doctors and health professionals helped families come to terms with the stressful experience of husbands being diagnosed with prostate cancer. Furthermore, support from doctors for cancer patients is considered a central aspect of resilience and a cornerstone of coping in the cancer and coping literature (Mellon & Northouse, 2002).

Since the diagnosis of breast cancer is considered a family crisis, the identification of resilience resources used by families will be discussed in the following sections. The family resilience qualities found in the present study will be discussed within three domains of family functioning (family belief systems, family organisational patterns and family communication patterns) (Walsh, 2012). Family belief systems include 'making meaning of the illness', a 'positive outlook' and 'spirituality'. These belief systems and key resilience qualities or

processes found in this study will be discussed alongside the relevant literature and theory in the following section.

### **6.3 Family belief systems**

The key resilience resources that fall within the family belief systems domain found qualitatively in the current study were: acceptance of the illness of breast cancer, managing the side effects of the illness, an optimistic view (positive outlook and confidence in overcoming the illness), spirituality, religion and faith in God (see Table 5.3). The complementary resources that were quantitatively identified were family hardiness, passive appraisal of a crisis situation, positive reframing of a crisis, and seeking of spiritual support in a crisis (see Table 5.1). These resilience qualities will be discussed in the following sections.

#### *6.3.1 Making meaning of the illness*

According to the Family Resilience Framework (Walsh, 2012), the acceptance of a crisis situation or stressful event, such as having a mother diagnosed with breast cancer, significantly influences a family's coping capabilities. Acceptance of the illness was mentioned in the qualitative results by 45% of the participants (see Table 5.2) in this study. The participants explained that it was easier to move forward in the healing processes once they had accepted the fact that they had breast cancer. They realised that there was nothing that could be done to change their situation and all they could do was accept the diagnosis and move forward.

In the current study, 91% of the participants comment on managing the side effects of cancer treatments such as chemotherapy and surgery (see Table 5.2). Not only did managing the side effects of cancer treatments assist families in adapting to the crisis, but it also helped them come to terms with the illness and accept the diagnosis. The participants believed if they were informed on what side effects to expect after chemotherapy, their family would ultimately have managed better and come to terms with the illness. Participants valued keeping to regular doctors' appointments, as this was helpful in managing the side effects of breast cancer treatments and offering guidance and assistance, hence making it easier to adapt to the illness and make meaning of their crisis situation (Walsh, 2012).

Both the Resilience Framework (Walsh, 2012) and the Resiliency Model (McCubbin & McCubbin, 1996) recognise the importance of a family's appraisal of a crisis in a family's

adjustment and adaptation process. Families in this study were able to make meaning of their adversity, in addition to normalising and contextualising their situation (Walsh, 2012), through clarifying situations (asking doctors for advice) and, secondly, managing future expectations or symptoms of the illness (see Table 5.2). These two aspects, according to Walsh (2012), help families maintain a sense of being in control of their environment and family life. A sense of control in family life fosters confidence that life will work out in a positive manner despite their crisis situation (see Table 5.2) and that the family will manage to adapt to the crisis (Walsh, 2012). These findings (see Table 5.2) are supported by several other family resilience studies (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff & Nolting, 2010; Jonker & Greeff, 2009). Information seeking through doctors or internet sources supported families to accept the diagnosis of chronic illnesses and promoted a more optimistic outlook and attitude (Bishop & Greeff, 2015; Greeff & Nolting, 2010; Greeff & Thiel, 2012).

The quantitative results show that redefining a stressor (crisis) and passive appraisal of a crisis situation had a significant positive relationship with family adaptation for the single-parent subgroup (see Table 5.3). These two findings suggest that family adaptation was better in single-parent families who could redefine or reframe the negative situation of a breast cancer diagnosis in manageable positive ways. In addition, the family's adaptation was better when they were able to accept problematic issues that come with a breast cancer diagnosis. Previous research (Greeff et al., 2006; Jonker & Greeff, 2009; Thiel & Greeff, 2012) give insight into the dynamics of positive reframing or redefinition of a crisis situation. Greeff et al.'s (2006) study similarly found positive reframing as a family resilience resource – according to parents and children – in divorced families.

For a family to be considered resilient they need to be able to contextualise the stressor event, make sense of the crisis situation and view the stressor event as manageable (McCubbin & McCubbin, 1996; Walsh, 2012). The resilience resource of viewing a situation as manageable allows families to feel a sense of control over their external and internal environments, inevitably stimulating hope, an optimistic attitude and positivity within the family unit (Hawley & DeHaan, 1996; McCubbin & McCubbin, 1996; Walsh, 2012).

A positive outlook in families with a mother diagnosed with breast cancer will be discussed in the next section. It is the second key resilience process within the family belief systems domain.



### 6.3.2 *Positive outlook*

In the current study a positive outlook on life following a breast cancer diagnosis was positively associated with better levels of family adaptation. All of the participants identified the resilience resource hope or an optimistic attitude and positive outlook (see Table 5.2 and Section 5.3.3). This finding confirms that optimism is in fact a resilience resource that assists families in their adaptation. Optimism equips a family with the strength to rise above adversity and assists families to view their situation as comprehensible and manageable (Walsh, 2012). Optimism is a fundamental resilience resource that fuels the energy for hope for a brighter future (Walsh, 2012). It helps families to reframe a negative situation into affirming family strengths and a “can do” spirit, which eventually leads to less guilty feelings, blaming or even shaming (Black & Lobo, 2008; Walsh, 2012).

In the present study, the participants emphasised the need to have hope for a better tomorrow in order to survive the illness. Some participants mentioned that their children were their motivation for being optimistic and gave them confidence in knowing that they could overcome their illness. A few participants spoke of not feeling well, health wise, the one day but then having confidence for better health the next day. In other words, the participants would take the illness day for day. Some participants also emphasised the need to speak positively about their illness (see Table 5.2). Families avoided negative talking or thinking within their family life while undergoing treatments, or negative talking about the illness (see Table 5.2 and Section 5.3.3).

The concept of an optimistic attitude is validated by several studies on family adaptation and optimism (Deist & Greeff, 2015; Greeff et al., 2014; Jonker & Greeff, 2009; Radina & Armer, 2004; Walsh, 2012). Similar to the present study, Deist and Greeff (2015) indicated a number of factors that allowed families to maintain an optimistic attitude, such as a sense of humour, positive thoughts about the illness or taking personal time out. In the same way, keeping a positive attitude, having hope and not giving up were prime examples of how families with a child with cancer maintained an optimistic attitude and increased the level of their adaptation (Greeff et al., 2014).

The quantitative findings of the current study mirror the qualitative findings of maintaining an optimistic attitude as a coping mechanism in a family with a mother with breast cancer. Although there is no direct quantitative measurement for optimism, family hardiness (indicated

by the total score of the FHI) is considered to have elements or aspects that represent a positive outlook and facilitate an optimistic view within the family system (see Table 5.3) (Deist & Greeff, 2015; McCubbin & McCubbin, 1996). In the current study, family hardiness had a significant positive correlation with family adaptation for both the single-parent subgroup and the two-parent subgroup (see Table 5.3). The family hardiness index has three subscales, namely (a) commitment – dedication to each other, (b) challenge – opportunity for growth and (c) control – sense of family environment control (see Table 5.3). Commitment, challenge and control (the three components of family hardiness) independently had significant positive correlations with family adaptation for both the single-parent and two-parent subgroups (see Table 5.3). These findings mean that, if families are able to work together and rely on other family members in times of need (commitment), or actively maintain an optimistic attitude during stressful times, seeing life challenges as an opportunity for growth and viewing the crisis situation as part of a normal life (challenge), or believe that they have control over their family life and environment (control), they will be more able to adapt to the challenges of a breast cancer diagnosis (see Tables 5.3 and 5.4 and Figure 5.2). However, these results should be interpreted with caution due to the relatively low reliability coefficient (Cronbach's alpha) obtained for the total Family Hardiness Index in this study (see Section 4.4.2.2).

The contribution of family hardiness to family resilience is also identified in the results of the best-subsets multiple regression analysis of the current study. Family hardiness is recognised as one of the five independent variables that best predicted family adaptation in families with a mother diagnosed with breast cancer (see Table 5.4). It was a statistically significant and important finding in this study, as it was included in all 20 of the 20 best regression subsets (see Figure 5.2). Again, however, this result should be interpreted with caution due to the low reliability obtained for this measure in this study. One possible explanation for this may be the low educational level of the majority of participants in this study. A low educational level could affect their understanding of the relative complex language used in the measure's items. Ambiguity of the items could have influenced the reliability.

Several research studies reinforce the notion that family hardiness serves as a family coping mechanism (Bishop & Greeff, 2015; Greeff & Wentworth, 2009; Greeff et al. 2012; Jonker & Greeff, 2009). Greeff et al. (2014) found family hardiness as statistically the most important significant correlation with family adaptation in families with a child with cancer. Evidently, family hardiness is of theoretical importance as well (McCubbin & McCubbin, 1996).

Spirituality is the remaining key resilience process within the first domain (family belief systems) of Walsh's (2012) Resilience Framework that was also found in this study. Spirituality will be discussed in the next section.

### *6.3.3 Spirituality, religion and faith in God*

Greeff and Joubert (2007) found that religion and faith in God had a positive influence on families after the death of a spouse. Due to the sensitive nature and fears of an imminent death that are associated with a breast cancer diagnosis, similar results were expected in this study.

The qualitative findings of the present study show the magnitude of spirituality, religion and faith in God after a breast cancer diagnosis (see Table 5.2). This key resilience resource and process was mentioned by all of the participants in this study (see Table 5.2), confirming the importance of this resource in the adaptation of families. Participants reported that God was their source of strength and support through difficult times. They believed God was in control of their lives and that the illness (breast cancer) was a part of their life's journey or destiny. Participants mentioned that praying together as a family helped them to mentally handle themselves throughout the different treatment phases of cancer. The relationship between family adaptation and religion and spirituality is supported by a number of South African family resilience studies on families who have faced a crisis (Bishop & Greeff, 2015; Greeff & Joubert, 2007; Greeff & Thiel, 2012; Jonker & Greeff, 2009). Greeff and Joubert (2007) found that families believed God was in control of their lives and that only 'something good' would come from the adverse conditions arising from the death and loss of a spouse. Similarly, Greeff and Thiel (2012) reported on the significance of spirituality as a resource that helped families to cope after the husband in a family was diagnosed with prostate cancer.

The participants in this study spoke of seeking spiritual support from friends in their congregation, community church or religious groups as a coping mechanism following a breast cancer diagnosis (see Table 5.2). Black and Lobo (2008) and Walsh (2012) indicate that external forms of religious support, such as congregational and community church affiliations, allowed families to feel connected to a wider community, where families with similar interest can meet and develop community support (Black & Lobo, 2008).

The quantitative results show a significant positive correlation between family adaptation and seeking spiritual support, but only in the single-parent subgroup (see Table 5.3). This finding

suggests that the single-parent families that made use of religious and spiritual networks as a coping mechanism were better adapted to the crisis of a breast cancer diagnosis. In the literature, Greeff et al. (2014) provide evidence of spiritual support as a significant resource in family adaptation in families with a child with cancer.

The qualitative and quantitative results of this study mirrored each other for the single-parent subgroup, but not for the two-parent family subgroup. A possible explanation for the fact that single-parent families make use of spiritual support networks is likely due to the lack of support from a husband or partner, leading to even more dependence on religious support and congregations.

The current study confirms that spirituality is an important ingredient for healthy family functioning and an influential key resilience resource that facilitates family adaptation following a breast cancer diagnosis (Walsh, 2012). The present study further confirms that religion and faith in God assist families in finding a greater purpose and meaning beyond their difficult circumstance and family crisis (see Table 5.2).

The second domain in Walsh's (2012) Resilience Framework is family organisational patterns. It encompasses 'family flexibility', 'connectedness' and 'social support'. These will be discussed in the next section.

#### **6.4 Family organisational patterns**

Family organisational patterns represents Walsh's (2012) second domain of family functioning. The qualitative findings and key resilience processes that emerged from the data are: being open to change of household organisation (family flexibility), support within the household after a crisis, informal support from family members, formal support from faith-based institutions and, finally, financial support (see Table 5.2). The quantitative findings of these key resilience resources are: family time and routines that promote couple togetherness after a crisis, family time and routines that promote family togetherness, family hardiness, family commitment to each other and, lastly, the utilisation of community resources and seeking social support (see Table 5.1). These resilience processes will be discussed in the sections below.

#### 6.4.1 *Family flexibility*

In the qualitative results, 45% of the sample identified being open to change (flexible) as a resilience resource (see Table 5.2). The concept of ‘flexibility’ suggests the participants willingness to make adjustments and changes in their usually ‘predictable’ family routines after a breast cancer diagnosis. Mothers could no longer perform their normal ‘motherly duties’ within the family system after undergoing cancer treatment such as chemotherapy or surgery. Motherly duties were taken over by husbands or children and included waking up early and preparing children for school, preparing school lunches, cleaning, washing, heavy lifting and cooking dinner every evening. Husbands and older children also took on the task of attending to the needs of the mother when she fell extremely ill.

Walsh (2012) and McCubbin and McCubbin (1996) suggest that families tend to function better when there is a good balance between stability and flexibility in the family system when a crisis occurs. Families tend to thrive on predictable, stable structures that promote routine (stability), whereas flexibility allows the opportunity to try new ways of handling adverse situations (Walsh, 2012). These components buffer the effects of change that a crisis such as a breast cancer diagnosis can bring to a family (Black & Lobo, 2008; Patterson, 2002; Walsh, 2012).

In the quantitative results of the present study, different types of family routines and activities that families often engage in (as measured by the FTRI) confirmed the significant correlation of this aspect with family adaptation for both the single-parent and two-parent subgroups. In the two-parent subgroup, engaging in activities and routines that promoted couple togetherness was identified as a family resilience resource (see Table 5.3), whereas for both the single-parent and two-parent families, spending time together as a family was identified as a family resilience resource (see Table 5.3). Family togetherness included special family occasions such as birthdays and get-togethers.

It is interesting to note that no significant correlation was found between family adaptation and the importance families (single- and two-parent) attribute to keeping family routines and predictable times in families. A possible reason for this is the manner in which items in the measuring instrument are used to assess the variables. Items in the FTRI frequently assume that only children under the age of 18 are living in the household. However, this is not the case, as the participating families in this study mostly had adult children living with them. Thus, many of the items in the FTRI focus on daily routines regarding children under the age of 18

(e.g. “children go to bed at the same time almost every night”). This item would not apply to adult children living with their mother. As a result, many of the items in the FTRI were not applicable to the target families in the present study.

The quantitative findings of the current study are supported and confirmed by previous research (Deist & Greeff, 2015; Greeff & Wentworth, 2009). In a study on resilience in families caring for a person with dementia, a significant positive correlation was found between family adaption and activities that promoted family time together (Deist & Greeff, 2015). Furthermore, the importance attributed to family routines was not indicated as a family resilience resource, similar to the current study (Deist & Greeff, 2015).

In the present study, families with a mother diagnosed with breast cancer found the diagnosis to be disabling in nature, and other family members often would take over household responsibilities after a mastectomy (see Table 5.2). Previous research confirms the family’s commitment to helping with household tasks (Greeff & Wentworth, 2009). After a mastectomy, participants are unable to use their arm for up to eight weeks, especially if the cancer had spread to their auxiliary lymph nodes (see Figure 1.1 and Table 5.2) (Love & Lindsey, 2010). The family’s ability to adjust to changes in the household while their mother is unfit to perform her daily functions plays a vital role in the adaptation process (see Table 5.3) (Walsh, 2012).

The second key resilience process, ‘connectedness’, found within the second domain of family functioning (family organisational patterns) (Walsh, 2012), will be discussed next.

#### *6.4.2 Family connectedness*

In the qualitative results, almost all of the participants (91%) identified the importance of family connectedness (see Table 5.2 and Section 5.3.4). Some participants described their families as “close knit”, which is associated with adaptive outcomes after a breast cancer diagnosis. This meant that the participants could be open about their feelings and speak freely on how they were feeling on a daily basis. The participants felt a sense of emotional, mutual and practical support from their family members following the breast cancer diagnosis. Support from family members while undergoing treatment for breast cancer was deemed a coping mechanism (see Table 5.2). For example, family members were sensitive and caring when their mother’s hair started falling out due to chemotherapy. Family members assisted participants

by shaving their hair off beforehand or by offering to buy wigs when hair loss was a traumatic experience (see Table 5.2).

The current study identified connectedness, as mentioned by 91% of the participants, as commitment, collaboration and mutual support amongst family members (see Table 5.2). These components of connectedness strengthen resilience in the families that utilise connectedness as a resource. In times of crisis, families need to be able to rely on each other to overcome stressful situations (Black & Lobo, 2008; Patterson, 2002; Walsh, 2012). Family connectedness and the relationship with family adaptation was significant in the qualitative and quantitative results of the present study.

Likewise, Jonker and Greeff (2009) found a similar theme, with 62% of their participants mentioning family characteristics such as emotional and practical support from family members and family closeness as influencing adaptive outcomes. Consistent with this view, Deist and Greeff (2015) reported on family connectedness as a family resilience resource, concurring with the results of the present study (see Table 5.2).

The quantitative results of the current study complement the qualitative findings, as family time and routines that promoted family togetherness were associated with adaptive outcomes for both the single-parent subgroup and two-parent families (see Table 5.3). These family routines included: mealtimes together, predictable routines, routines that promoted meaningful connections with parents, and activities that promoted couple togetherness (see Table 5.3). However, these results regarding family routines should be interpreted with caution due to the relatively low reliability coefficient (Cronbach's alpha) obtained for the independent subscales of the Family Time and Routine measure in this study (see Section 4.4.2.2).

In line with the theoretical foundations of the present study, Walsh (2012) reports that families need connectedness that promotes continuity and stability to help them overcome adversity. Black and Lobo (2008) provide further evidence of the importance of family connectedness by highlighting the importance of mealtimes (a family routine) in the family adaptation processes. They argue that mealtimes are considered a main activity for families to spend quality time with one another (Black & Lobo, 2008). Similar to the present study, Greeff and Wentworth (2009) reported a significant positive correlation between routines that promote parent-child togetherness and family adaptation.

The third and final key resilience processes, ‘support’, found within the second domain (family organisational patterns) of the Resilience Framework (Walsh, 2012), will be discussed in the next section.

#### *6.4.3 Social support*

Family is defined as those who rely on each other for emotional and economical support in day-to-day living (Black & Lobo, 2008). In the Resiliency Model (McCubbin & McCubbin, 1996), two different types of family social support are recognised. First, social support can be from formal institutions such as medical professionals, congregations and schools. Second, it can be informal forms of social support, such as close family friends and extended family members. Walsh (2012) proposes that resilient families are those who possess the awareness and strength to admit that their family needs help from support networks. These different forms of social support will be discussed in this section.

In the present study, the qualitative findings validate the importance of social support as a means of coping with a mother diagnosed with breast cancer. Four main types of social support were uncovered in the qualitative data through a process of thematic analysis. These are: (a) support within the household, (b) informal support from family members, (c) formal support from faith-based institutions, and (d) financial support (see Table 5.2). These forms of social support will be discussed briefly in this section.

First, participants frequently mentioned support within the household as a resilience resource after being diagnosed with breast cancer (see Table 5.2). Many of the participants in this study described how they were bedridden due to the side effects of chemotherapy and could not use their arms for a number of weeks after their mastectomy (breast removal). Support within the household allowed for the taking over of duties that mothers could no longer fulfil while recovering from breast cancer. These duties included the day-to-day running of the household, such as cooking, sweeping, cleaning, laundry and heavy lifting. Previous research provides evidence that household support is an influential resource associated with adaptive outcomes (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff & Nolting, 2013).

In terms of support within the household, a statistically significant correlation was found between family commitment and family adaptation (see Table 5.3). This commitment refers to a family’s sense of dependability on one another, internal strengths and the ability to work together, especially in times of crisis. Family hardiness is also present in the best-subsets



regression analysis (see Figure 5.2 and Table 5.4). An abundance of previous studies validate family commitment as an important resilience resource (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff et al., 2012). For example, Greeff et al. (2012) reported a significant positive correlation between family adaptation and family commitment in families living with a child with a physical disability.

Second, informal support from family members further validates social support as a resilience resource in families with a mother diagnosed with breast cancer in the qualitative findings (see Table 5.2). Family support included moral support at doctors' appointments, keeping in contact with one another, talking to each other when feeling down or depressed, and providing emotional and physical support throughout the different treatment phases. Support from family members is recognised extensively as a prominent factor in South African family resilience research studies after a family crisis (Bishop & Greeff, 2015; Deist & Greeff, 2015; Greeff & Thiel, 2012; Greeff & Wentworth, 2009; Jonker & Greeff, 2009). More importantly, emotional support from family members is said to buffer the effects of stress that a chronic illness may bring (Greeff & Thiel, 2012).

However, in the present study, informal support from family members was not identified as a family resilience resource in the quantitative findings. The family's use of relative and friends as a coping mechanism (as measured by the relative and friend support index (RFS) was not significantly correlated with family adaptation in this study. Furthermore, a family's ability to seek support from extended family members and close friends was also not significantly correlated with family adaptation for any of the two subgroups in this study (see Table 5.3). Therefore, the qualitative findings are not confirmed by the quantitative findings in this study. It is interesting to note that the inconsistency in these findings is not uncommon, as similar results have been reported in other South African family resilience studies (Bishop & Greeff, 2015; Greeff & Thiel, 2012).

Third, formal support from faith-based religious institutions and community support were recognised as a valuable resilience resource in families in the qualitative findings (see Table 5.2). Religious support groups were considered a familiar source of solace throughout the different treatment phases of breast cancer (see Table 5.2). These support groups were provided by a community church in the local area of the participants. Religious support groups were known to hold regular prayer meetings and assist families in times of need. Pastors frequently visited participants in hospital and prayed with families before or after surgery. Gregg (2011)

found that support from religious establishments increased following a breast cancer diagnosis. In the same light, Walsh (2012) addressed the importance of religious groups and community support in promoting well-being and emotional support in a family.

A family's level of integration into their society and the extent to which they found their community to be supportive was a significant resilience resource for the two-parent families (see Table 5.3). This quantitative finding indicates that two-parent families considered their community to be a useful family resource after a breast cancer diagnosis. However, the family's ability to seek help from community resources and accept the resources as a source of support were not statistically significantly correlated with family adaptation for any of the two subgroups in this research. Similar results were obtained in previous studies (Bishop & Greeff, 2015; Greeff & Thiel, 2012), where the utilisation of community support and seeking support were significantly positively associated with adaptive family outcomes, yet no significant correlation was found between family adaptation and the ability to seek out community resources and accept help from the community (as measured by the F-COPES mobilising subscale).

Research has increasingly discussed the central aspect of community as a resilience resource (Gregg, 2011; Walsh, 2012). Community churches and faith-based organisations help women to cope throughout the survivorship of their breast cancer diagnosis (Gregg, 2011). In African countries it is commonly known that community engagement and a sense of connectedness through a community is considered valuable (Casale, 2015). Community connections play an important role in protecting mental and physical health, especially in contexts where resources are scarce (Casale, 2015).

Fourth, financial support from family and friends is a prominent form of social support following a breast cancer diagnosis and is a confirmed resilience resource (see Table 5.2). A cancer diagnosis can be a financial burden on families that drains economic resources over time (Greeff & Thiel, 2012; Mellon & Northouse, 2002). In this study, as many as 82% of the participants reported financial assistance from other family members, friends or colleagues as being valuable to their families. According to Statistics South Africa (2015), the average annual income of low-income groups is R19 200, which is the equivalent of R1 600 per a month. This study's sample is considered to fall into the low-income bracket, as more than half of the participants survived on government funding, which amounts to R1 600 per month (see Section 4.3.1). These families could not afford day-to-day living and transport costs

or healthier food options and were often assisted financially by family, friends or colleagues (see Table 5.3).

In the current study, family income was not significantly correlated with family adaptation. Likewise, in the Greeff and Wentworth (2009) study, no significant correlation was found between family income and family adaptation. However, the target families in the Greeff and Wentworth (2009) study were in a higher income bracket than the income bracket of this study's sample. A possible explanation for this non-significant finding in both of these studies may be that the families' income may have fallen in such a narrow bracket (low in this study and middle in the other study) that the low variance (in income) prevented a significant finding. Walsh (2012) and Black and Lobo (2008) state that financial security is deemed an imperative element of family well-being and that good financial management can promote resilience in families.

By definition, poorer families lack sufficient economic resources and often deal with a pile up of demands that come with poverty, retirement, unemployment, lack of health care, lack of medical aid and substandard housing (Black & Lobo, 2008, Orthner, Jones-Sanpei & Williams, 2005). Often poor families are forced into making difficult life decisions (Mullin & Arce, 2008). Nonetheless, low-income poor families appeared remarkably resilient and capable of achieving family well-being despite the lack of economic resources (see Table 5.2). Orthner, et al. (2005) found in their study that family resilience and well-being were present in low-income families and attributed this family resilience to these families' problem-solving skills and ability to communicate with one another.

Family communication and problem-solving is the third and final domain in the Family Resilience Framework (Walsh, 2012). In this domain, key resilience processes found in families with a mother diagnosed with breast cancer in the qualitative component are: open, clear, and positive communication (see Table 5.2). The complementary quantitative finding is family's affirming and positive styles of communication (see Table 5.3). This is the final section that will be discussed within the structure of Walsh's (2012) Resilience Framework.

### **6.5 Family communication and family problem-solving processes**

All of the participants (100%) reported in the semi-structured interviews that positive, open, clear communication helped their families to adapt to the crisis when interacting with one another (see Table 5.2). The participants divulged that being vulnerable and willing to talk about

their breast cancer experiences to their family members made adapting to the stressful circumstances easier. It resulted in family members being aware of the different treatments their mother was going through and cultivated better understanding in the family. Family members were able to care for and support each other effectively, either on an emotional or physical level. Furthermore, age-appropriate communication about the breast cancer diagnosis for younger children was considered an effective means of coping for mothers. As younger children were unable to comprehend the concept of the cancer diagnosis, appropriate communication was deemed a necessary resilience resource (see Table 5.2 and Section 5.3.3).

Communication processes are known to promote resilience in families by bringing clarity to crisis situations (Walsh, 2012). In the cancer literature, open communication between patients with cancer, doctors and family members is a cornerstone of coping (Kershaw et al., 2004; Trudel et al., 2014). A strong association between family adaptation and utilising clear, consistent, open communication is supported by an abundance of previous studies (Greeff & Human, 2004; Greeff & Lawrence, 2012; Greeff et al., 2012; Greeff & Van Den Berg, 2013). Greeff et al. (2012) found that open communication in which family members can talk to one another without fear and judgement was considered a resilience resource in families with a child with cancer. Keeping the family informed as crisis situations develop helped families with problem solving and rendered the dire situation manageable (Walsh, 2012). Communication helps families understand and respect each other even in times of disagreement. If families do not discuss crisis situations or are not capable of sharing emotions with other family members it results in an increase in tension, anxiety and fears about outcomes (Black & Lobo, 2008; McCubbin & McCubbin, 1996; Walsh, 2012).

The independent variable, family problem solving and communication patterns was identified as a family resilience resource that helped families to cope with a mother diagnosed with breast cancer in both the single-parent and two-parent subgroup (see Table 5.3). In contrast, negative and confrontational styles of communication had a significant negative correlation with family adaptation (see Table 5.3). This means that families who used supportive and compassionate communication with each other were better able to cope and adapt following a breast cancer diagnosis (see Table 5.3). On the other hand, the participants felt that confrontational styles of communication exacerbated problems and negatively affected the family's ability to adapt to the breast cancer diagnosis (see Table 5.3). The family problem solving and communication variable is present in the best-subsets regression analysis and is a significant predictor of family

adaptation (see Table 5.4 and Figure 5.2). The overall family problem solving and communication patterns of the target families were present in all 20 of the best subsets, therefore validating the significant contribution of this independent variable in predicting family adaptation in families with a mother diagnosed with breast cancer (see Figure 5.2).

A number of family resilience studies, specifically relating to South African families, echo the findings of the present study (Greeff & Wentworth, 2009; Jonker & Greeff, 2009). Also, Black and Lobo (2008) support the findings of the importance of positive communication expressed through support and care for one another. Furthermore, the finding that negative communication styles are inversely associated with family adaptation further validates positive communication as a family resilience resource (Deist & Greeff, 2014; Greeff & Thiel, 2012; Greeff & Wentworth, 2009; Jonker & Greeff, 2009). Therefore, a family with higher levels of positive communication will be more open to talking about the illness, providing a safe and non-judgemental environment to discuss family problems.

The limitations of the present study and recommendations for future studies, as well as the final conclusions, will be discussed next.

## **6.6 Limitations of this study and recommendations for future research**

This research study has highlighted a number of a resilience characteristics and resources that are utilised by families with a mother diagnosed with breast cancer. However, there are several limitations of the present study that motivated recommendations for future research. The limitations are related to the research design, data collection, the sample and the quantitative measures.

First, the participating families in this study were represented by only the mother of the family. The mother was required to answer the qualitative open-ended questions and the quantitative self-report measures, thereby speaking on behalf of all family members. The voices of the majority were not heard. Input from another one or two family members would have been advantageous, as it would have improved the credibility of the data. In future studies the trustworthiness of results can be increased by gathering data from more than one family member.

Second, the sample for this study was homogenous due to the convenience sampling strategy that was used. Many of the families had comparable living conditions, lived in similar poor

suburbs and had similar cultural backgrounds. It is recommended that future research include a sample that is representative of the diverse South African population.

Third, a cross-sectional survey research design was used in this study. A longitudinal research design can be employed and may be advantageous for future research, as it will be able to investigate how family resilience resources change and fluctuate over time.

Fourth, many participants found it difficult to understand the items in the measuring instruments due to the ambiguous wording of some items. I clarified items for the participants during the data collection process and had to complete some questionnaires myself, as many participants could not read or write. This may have influenced the participants' responses to items. It is recommended that the wording in questionnaires be adjusted and adapted to synchronise with the cultural background and educational level of participants.

## **6.7 Conclusion**

The aim of this study was to identify and explore resilience factors, characteristics and resources in families with a mother diagnosed with breast cancer through a mixed-method parallel convergent research design. Qualitative and quantitative data were collected at the Tygerberg Academic Hospital Breast Clinic and later analysed. The motivation for this study included the availability of research on cancer and coping, as well as the large gap in and paucity of literature on family resilience and a breast cancer diagnosis (Lim, 2014; Mellon & Northouse, 2002; Radina & Armer, 2004), specifically in a South African context.

The findings of this study indicate that family hardiness is indeed a resilience resource and is associated with family adaptation. Interventions can focus on aspects that help families to overcome a chronic illness, including: reframing crisis situations, working together as a family, being accountable in times of need, actively maintaining an optimistic attitude during stressful periods, and viewing challenges as opportunities for growth. In addition, utilising support from the community, utilising community resources, awareness of spirituality and faith in God, using positive, affirming styles of communication and avoiding negative talking are associated with adaptive outcomes in families. Family time and routines was positively associated with family adaption, more specifically: couple togetherness, mealtimes together, predictable communication between parents and children, as well as special family occasions. Furthermore, the participants emphasised internal family attributes, which included: a family's belief systems such as a sense of gratitude, acceptance of the illness, flexibility in the family

system, family connectedness with extended family members. Additionally, external resources, for instance support from friends and family, support from religious groups and financial support, were all identified as resilience factors. Finally, managing the side effects of cancer treatments following a breast cancer diagnosis is associated with successful adaptation. These include keeping to regular doctors' appointments, being prepared for the side effects of chemotherapy and surgery beforehand and, lastly, seeking information about the illness from doctors in uncertain times.

Located in the scope and realm of positive psychology, this research provides potential resilience resources, factors, characteristics and attributes that families in comparable situations can use. These key resilience processes can be used to manage, adjust and adapt following a breast cancer diagnosis in a family. Furthermore, families may emerge more resourceful and better equipped to handle future life challenges they may face.

Although the sampling method used in this study limits its generalisability to other populations, the findings of this study can be implemented by medical professionals, community counsellors and psychologists in interventions aimed at helping families with mothers who were diagnosed with breast cancer.

## References

- Achimas-Cadariu, P., Iancu, M., Pop, F., Vlad, C., & Irimie, A. (2015). Psychological screening and health related quality of life in Romanian breast cancer survivors. *Journal of Evidence-Based Psychotherapies*, 15(2), 267. Retrieved from <http://web.a.ebscohost.com.ez.sun.ac.za/ehost/pdfviewer/pdfviewer?vid=4&sid=370e35c7-a8d2-4a9d-87d8-2093c0f61af2%40sessionmgr4007&hid=4214>
- American Cancer Society. (2015). *Breast cancer facts & figures 2015-2016*. Retrieved from <http://www.cancer.org/acs/groups/content/@research/documents/document/acspc-046381.pdf>
- American Cancer Society. (2017). *Breast cancer. What is cancer?* Retrieved from [www.cancer.org](http://www.cancer.org)
- Andrew, S., & Halcomb, E. J. (2006). Mixed methods research is an effective method of enquiry for community health research. *Contemporary Nurse*, 23(2), 145-153. doi:10.5172/conu.2006.23.2.145
- Antonovsky, A. (1979). *Health, stress, and coping: New perspectives on mental and physical well-being*. San Francisco USA: Jossey-Bass.
- Antonovsky, A. (1996). The salutogenic model as a theory to guide health promotion 1. *Health Promotion International*, 11(1), 11-18. Retrieved from <http://www.scopus.com/inward/record.url?eid=2-s2.0-0029863517&partnerID=tZOtx3y1>
- Anuradha, K. (2004) Empowering families with mentally ill members: A strengths perspective. *International Journal for the Advancement of Counselling*, 26, 383-391. doi:10.1007/s10447-004-0174-x
- Apffelstaedt, J. P., Dalmayer, L., & Baatjes, K. (2014). Mammographic screening for breast cancer in a resource-restricted environment. *SAMJ: South African Medical Journal*, 104(4), 294-296. doi:10.7196/SAMJ.7246
- Becvar, D. S. (Ed.). (2012). *Handbook of family resilience*. New York, NY: Springer Science & Business Media.
- Bishop, M., & Greeff, A. P. (2015). Resilience in families in which a member has been diagnosed with schizophrenia. *Journal of Psychiatric and Mental Health Nursing*, 22(7), 463-471. doi:10.1111/jpm.12230



- Bitsika, V., Sharpley, C. F., & Christie, D. R. H. (2010). "What made me unhappy". Experiences of, and responses to, lifestyle changes in breast cancer patients. *British Journal of Guidance & Counselling*, 38(2), 179-189.  
doi:10.1080/03069881003601015
- Black, K., & Lobo, M. (2008). A conceptual review of family resilience factors. *Journal of Family Nursing*, 14(1), 33-55. doi:10.1177/1074840707312237
- Bowen, D. J., Morasca, A. A., & Meischke, H. (2003). Measures and correlates of resilience. *Women & Health*, 38(2), 65-76. doi:10.1300/J013v38n02\_05
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
- Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. London UK: Sage.
- Brown, R. T., Fuemmeler, B., Anderson, D., Jamieson, S., Simonian, S., Hall, R. K., & Brescia, F. (2007). Adjustment of children and their mothers with breast cancer. *Journal of Pediatric Psychology*, 32(3), 297-308. doi:10.1093/jpepsy/jsl015
- Brown-Baatjies, O., Fouché, P., & Greeff, A. (2008). The development and relevance of the Resiliency Model of Family Stress, Adjustment and Adaptation. *Acta Academica*, 40(1), 78-126. Retrieved from <https://journals.co.za/content/academ/40/1/EJC15403>
- Campbell-Enns, H. J., & Woodgate, R. L. (2013). Decision making for mothers with cancer: Maintaining the mother-child bond. *European Journal of Oncology Nursing*, 17(3), 261-268. doi:10.1016/j.ejon.2012.07.006
- CANSA. (2017a). *Women's health: Women and cancer*. Retrieved from <http://www.cansa.org.za/womens-health/>
- CANSA. (2017b). *Statistics: South African cancer statistics*. Retrieved from <http://www.cansa.org.za/south-african-cancer-statistics/>
- Casale, M. (2015). The importance of family and community support for the health of HIV-affected populations in Southern Africa: What do we know and where to from here? *British Journal Health Psychology*, 20, 21-35. doi:10.1111/bjhp.12127
- Cozby, P. C. (2009). *Methods in behavioral research* (10<sup>th</sup> ed.). New York, NY: McGraw-Hill.
- Creswell, J. W., & Plano-Clark, V. L. (2007). *Designing and conducting mixed methods research*. Los Angeles, USA: Sage Publications.

- Davey, M. P., Niño, A., Kissil, K., & Ingram, M. (2012). African American parents' experiences navigating breast cancer while caring for their children. *Qualitative Health Research, 22*(9), 1260-1270. doi:10.1177/1049732312449211
- Deist, M., & Greeff, A. P. (2015). Resilience in families caring for a family member diagnosed with dementia. *Educational Gerontology, 41*(2), 93-105. doi:10.1080/03601277.2014.942146
- Doumit, M. A., Huijser, H. A. S., Kelley, J. H., El Saghir, N., & Nassar, N. (2010). Coping with breast cancer: A phenomenological study. *Cancer Nursing, 33*(2), 33-39. Retrieved from <http://ovidsp.tx.ovid.com.ez.sun.ac.za/sp-3.19.0a/ovidweb>
- Doyle, L., Brady, A. M., & Byrne, G. (2009). An overview of mixed methods research. *Journal of Research in Nursing, 14*(2), 175-185. doi:10.1177/1744987108093962
- Edge, J., Buccimazza, I., Cubasch, H., & Panieri, E. (2014). The challenges of managing breast cancer in the developing world – a perspective from sub-Saharan Africa. *SAMJ: South African Medical Journal, 104*(5), 377-379. doi:10.7196/SAMJ.8249
- Feldman, B. N., & Broussard, C. A. (2006). Men's adjustment to their partners' breast cancer: A dyadic coping perspective. *Health & Social Work, 31*(2), 117-127. doi:10.1093/hsw/31.2.117
- Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs – principles and practices. *Health Services Research, 48*, 2134-2156. doi:10.1111/1475 6773.12117
- Fischer, J., & Corcoran, K. (2007). *Measures for clinical practice and research: A sourcebook. Couples, families, and children* (Vol. 1). New York: NY Oxford University Press.
- Greeff, A. P. (2013). Aspects of family resilience in various groups of South African families. In M. P. Wissing (Ed.), *Well-being research in South Africa* (pp. 273-291). Dordrecht: Springer.
- Greeff, A. P., & Du Toit, C. (2009). Resilience in remarried families. *The American Journal of Family Therapy, 37*(2), 114-126. doi:10.1080/01926180802151919
- Greeff, A. P., & Fillis, A. J. (2009). Resiliency in poor single-parent families. *Families in Society: The Journal of Contemporary Social Services, 90*(3), 279-285. doi:10.1606/1044-3894.3902
- Greeff, A. P., & Human, B. (2004). Resilience in families in which a parent has died. *The American Journal of Family Therapy, 32*(1), 27-42. doi:10.1080/01926180490255765

- Greeff, A. P., & Joubert, A. M. (2007). Spirituality and resilience in families in which a parent has died. *Psychological Reports, 100*(3), 897-900.
- Greeff, A. P., & Lawrence, J. (2012). Indications of resilience factors in families who have lost a home in a shack fire. *Journal of Community & Applied Social Psychology, 22*(3), 210-224. doi:10.1002/casp.1108
- Greeff, A. P., & Nolting, C. (2013). Resilience in families of children with developmental disabilities. *Families, Systems, & Health, 31*(4), 396-405. doi:/10.1037/a0035059
- Greeff, A. P., & Thiel, C. (2012). Resilience in families of husbands with prostate cancer. *Educational Gerontology, 38*, 179-189. doi:10.1080/03601277.2010.532068.
- Greeff, A. P., & Van den Berg, E. (2013). Resilience in families in which a child is bullied. *British Journal of Guidance & Counselling, 41*(5), 504-517. doi:10.1080/03069885.2012.757692
- Greeff, A. P., & Van der Walt, K. J. (2010). Resilience in families with an autistic child. *Education and Training in Autism and Developmental Disabilities, 347-355*.
- Greeff, A. P., & Wentworth, A. (2009). Resilience in families that have experienced heart-related trauma. *Current Psychology, 28*(4), 302-314. doi:10.1007/s12144-009-9062-1
- Greeff, A. P., Vansteenwegen, A., & Demot, L. (2006). Resiliency in divorced families. *Social Work in Mental Health, 4*(4), 67-81. doi:10.1300/J200v04n04\_05
- Greeff, A. P., Vansteenwegen, A., & Geldhof, A. (2014). Resilience in families with a child with cancer. *Pediatric Hematology and Oncology, 670-679*. doi:10.3109/08880018.2014.905666
- Greeff, A. P., Vansteenwegen, A., & Gillard, J. (2012). Resilience in families living with a child with a physical disability. *Rehabilitation Nursing, 37*(3), 97-104. doi:10.1002/RNJ.00018
- Gregg, G. (2011). I'm a Jesus girl: Coping stories of black American women diagnosed with breast cancer. *Journal of Religion and Health, 50*(4), 1040-1053. doi:10.1007/s10943-010-9395-y
- Hawley, D. R. (2000). Clinical implications of family resilience. *American Journal of Family Therapy, 28*(2), 101-116. doi:10.1080/019261800261699
- Hawley, D. R., & DeHaan, L. (1996). Toward a definition of family resilience: Integrating life-span and family perspectives. *Family Process, 35*, 283-298. doi:10.1111/j.1545-5300.1996.00283.x
- Hoke, L. A. (2001). Psychosocial adjustment in children of mothers with breast cancer. *Psycho-Oncology, 10*, 361-369. doi:10.1002/pon.515

- Hsiao-Yu, C., & Boore, J. P. (2010). Translation and back-translation in qualitative nursing research: Methodological review. *Journal of Clinical Nursing*, *19*(1/2), 234-239. doi:10.1111/j.1365-2702.2009.02896.x
- Jonker, L., & Greeff, A. P. (2009). Resilience factors in families living with people with mental illnesses. *Journal of Community Psychology*, *3*, 859-873. doi:10.1002/jcop.20337
- Kershaw, T., Northouse, L., Kritpracha, C., Schafenacker, A., & Mood, D. (2004). Coping strategies and quality of life in women with advanced breast cancer and their family caregivers. *Psychology & Health*, *19*(2), 139-155. doi:10.1080/08870440310001652687
- Kim, Y., Wellisch, D. K., & Spillers, R. L. (2008). Effects of psychological distress on quality of life of adult daughters and their mothers with cancer. *Psycho-Oncology*, *17*(11), 1129-1136. doi:10.1002/pon.1328
- Kvillemo, P., & Branstrom, R. (2014) Coping with breast cancer: A meta-analysis. *PLOS ONE*, *9*, 1-27. doi:10.1371/0112733
- Lavee, Y., McCubbin, H. I., & Patterson, J. M. (1985). The double ABCX model of family stress and adaptation: An empirical test by analysis of structural equations with latent variables. *Journal of Marriage and the Family*, 811-825. doi:10.2307/352326
- Lifford, K. J., Witt, J., Burton, M., Collins, K., Caldon, L., Edwards, A., ... & Brain, K. (2015). Understanding older women's decision making and coping in the context of breast cancer treatment. *BMC Medical Informatics and Decision Making*, *15*(1), 1-12. doi:0.1186/s12911-015-0167-1
- Lim, J. W. (2014). Communication, coping, and quality of life of breast cancer survivors and family/friend dyads: A pilot study of Chinese-Americans and Korean-Americans. *Psycho-Oncology*, *23*(11), 1243-1251. doi:10.1002/pon.3532
- Lopez, S. J., & Gallagher, M. W. (2009). A case for positive psychology. In C. R. Snyder & S. J. Lopez (Eds.), *The Oxford handbook of positive psychology* (pp. 3-6). New York NY: Oxford University Press.
- Love, S. M., & Lindsey, K. (2010). *Dr. Susan Love's breast book*. New York NY: Da Capo Press.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, *56*(3), 227-238. <http://dx.doi.org.ez.sun.ac.za/10.1037/0003-066X.56.3.227>

- Matatiele, P. R., & Van den Heever, W. M. (2008). Breast cancer profiles of women presenting with newly diagnosed breast cancer at Universitas Hospital (Bloemfontein, South Africa). *South African Family Practice*, 50(6), 48-49.  
doi:10.1080/20786204.2008.10873786
- McCubbin, H. I., & McCubbin, M. A. (1988). Typologies of resilient families: Emerging roles of social class and ethnicity. *Family Relations*, 37, 247-254.
- McCubbin, H. I., Larsen, A., & Olson, D. (1982). The Relative and Friend Support Index (RFS). In H. I. McCubbin, A. I. Thompson & M. A. McCubbin (1996). *Family assessment: Resiliency, coping and adaptation – Inventories for research and practice* (p. 825). Madison, WI: University of Wisconsin System.
- McCubbin, H. I., McCubbin, M. A., & Thompson, A. I. (1986). Family Time and Routines Index (FTRI). In H. I. McCubbin, A. I. Thompson & M. A. McCubbin (1996). *Family assessment: Resiliency, coping and adaptation – Inventories for research and practice* (pp. 325-340). Madison, WI: University of Wisconsin System.
- McCubbin, H. I., Olson, D., & Larsen, A. (1981). Family Crisis Oriented Personal Scales (F-COPES). In H. I. McCubbin, A. I. Thompson & M. A. McCubbin. *Family assessment: Resiliency, coping and adaptation – Inventories for research and practice* (pp. 455-507). Madison, WI: University of Wisconsin System.
- McCubbin, H. I., Patterson, J., & Glynn, T. (1982). Social Support Index (SSI). In H. I. McCubbin, A. I. Thompson & M. A. McCubbin (1996). *Family assessment: Resiliency, coping and adaptation – Inventories for research and practice* (pp. 357-389). Madison, WI: University of Wisconsin System.
- McCubbin, H. I., Thompson, A. I., & Elver, K. M. (1995). Family Attachment and Changeability Index 8 (FACI8). In H. I. McCubbin, A. I. Thompson, & M. A. McCubbin (1996). *Family assessment: Resiliency, coping and adaptation – Inventories for research and practice* (pp. 725-751). Madison, WI: University of Wisconsin System.
- McCubbin, M., & McCubbin, H. (1996). Resiliency in families: A conceptual model of family adjustment and adaptation in response to stress and crisis. In H. I. McCubbin, A. I. Thompson & M. A. McCubbin (Eds.), *Family assessment: Resiliency, coping and adaptation – Inventories for research and practice* (pp. 1-64). Madison, WI: University of Wisconsin System.

- McCubbin, M. A., McCubbin, H. I., & Thompson, A. I. (1986). Family Hardiness Index (FHI). In H. I. McCubbin, A. I. Thompson & M. A. McCubbin (1996). *Family assessment: Resiliency, coping and adaptation – Inventories for research and practice* (pp. 239-305). Madison, WI: University of Wisconsin System.
- McCubbin, M. A., McCubbin, H. I., & Thompson, A. I. (1988). Family Problem Solving Communication (FPSC). In H. I. McCubbin, A. I. Thompson & M. A. McCubbin (1996). *Family assessment: Resiliency, coping and adaptation – Inventories for research and practice* (pp. 639-686). Madison, WI: University of Wisconsin System.
- Mellon, S. (2002). Comparisons between cancer survivors and family members on meaning of the illness and family quality of life. *Oncology Nursing Forum*, 29(7), 1117-1125. doi:10.1188/02.ONF.1117-1125
- Mellon, S., & Northouse, L. L. (2001). Family survivorship and quality of life following a cancer diagnosis. *Research in Nursing and Health*, 24(6), 446-459. doi:10.1002/nur.10004
- Merriam-Webster Online Dictionary (2017) Retrieved from: <https://www.merriam-webster.com/dictionary/resource>.
- Mukwato, K. P., Mweemba, P., Makukula, M. K., & Makoleka, M. M. (2010). Stress and coping mechanisms among breast cancer patients and family caregivers: A review of literature. *Medical Journal of Zambia*, 37(1), 40-45. Retrieved from <https://www.ajol.info/index.php/mjz/article/view/75653>
- Mullin, W. J., & Arce, M. (2008). Resilience of families living in poverty. *Journal of Family Social Work*, 11(4), 424-440. doi: 10.1080/10522150802424565
- Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches* (7<sup>th</sup> ed.). London, UK: Pearson.
- Orthner, D. K., Jones-Sanpei, H, & Williamson, S. (2004), The resilience and strengths of low-income families. *Family Relations*, 53(2), 159-167. doi:10.1111/j.0022-2445.2004.00006.x
- Patterson, J. M. (2002). Understanding family resilience. *Journal of Clinical Psychology*, 58(3), 233-246. doi:10.1002/jclp.10026
- Radina, M. E., & Armer, J. M. (2004). Surviving breast cancer and living with lymphedema: Resiliency among women in the context of their families. *Journal of Family Nursing*, 10(4), 485-505. doi:10.1177/1074840704269847
- Reber, A., Allen, R., & Reber, E. (Eds.). (2009). *The Penguin dictionary of psychology*. London: Penguin.

- Salonen, P., Kellokumpu-Lehtinen, P., Tarkka, M., Koivisto, A., & Kaunonen, M. (2011). Changes in quality of life in patients with breast cancer. *Journal of Clinical Nursing*, 20(1/2), 255-266. doi:10.1111/j.1365-2702.2010.03422.x
- Schwandt, T. A., Lincoln, Y. S., & Guba, E. G. (2007). Judging interpretations: But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Evaluation*, 114, 11-25. doi:10.1002/ev.223
- Sestak, I., & Cuzick, J. (2015). Update on breast cancer risk prediction and prevention. *Current Opinion in Obstetrics and Gynecology*, 27(1), 92-97. doi:10.1097/GCO.0000000000000153
- Sharpley, C. F., Bitsika, V., & Christie, D. R. (2010). 'Why I feel bad': Refinement of the Effects of Prostate Cancer Upon Lifestyle Questionnaire and an initial exploration of its links with anxiety and depression among prostate cancer patients. *Psycho-Oncology*, 19(8), 839-846. doi:10.1002/pon.1623
- Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75. doi:10.1111/j.1744-618X.2000.tb00391.x
- Siegel, R., Ma, J., Zou, Z., & Jemal, A. (2014). Cancer statistics, 2014. *CA: A Cancer Journal for Clinicians*, 64(1), 9-29. doi:10.3322/caac.21208
- Skerrett, K. (2003). Couple dialogues with illness: Expanding the "we". *Families, Systems, & Health*, 21(1), 69-80. doi:10.1037/h0089503
- Statistics South Africa (2015). *Census 2011: Income dynamics and poverty status of households in South Africa*. Retrieved from: <http://www.statssa.gov.za>.
- South African Government (2017) *Old age pension*. Retrieved from: <https://www.gov.za/services/social-benefits-retirement-and-old-age/old-age-pension>.
- Strümpfer, D. J. (2013). Towards fortigenesis and fortology: An informed essay. In M. P. Wissing (Ed.), *Well-being research in South Africa* (pp. 7-38). Dordrecht: Springer
- Terre Blanche, M., Durrheim, K., & Painter, D. (Eds.). (2006). *Research in practice* (2nd ed.). Cape Town South Africa: University of Cape Town Press.
- Trudel, J. G., Leduc, N., & Dumont, S. (2014). Perceived communication between physicians and breast cancer patients as a predicting factor of patients' health-related quality of life: A longitudinal analysis. *Psycho-Oncology*, 23(5), 531-538. doi:10.1002/pon.3442
- Walsh, F. (1996). The concept of family resilience: Crisis and challenge. *Family Process*, 35, 261-281. doi: 10.1111/j.1545-5300.1996.00261.x

- Walsh, F. (2003). Family resilience: A framework for clinical practice. *Family Process*, 42(1), 1-18. Retrieved from <http://web.a.ebscohost.com.ez.sun.ac.za/ehost/pdfviewer/pdfviewer?sid=0a653062-9fd3-46c2-9393-332759ca6053%40sessionmgr4005&vid=1&hid=4107>
- Walsh, F. (Ed.). (2012). *Normal family processes: Growing diversity and complexity* (4<sup>th</sup> ed.). New York, NY: Guilford Press.
- Walsh, F. (2016). Family resilience: A developmental systems framework. *European Journal of Developmental Psychology*, 13(3), 313-324.
- Werner, E. E., & Smith, R. S. (2001). *Journeys from childhood to midlife: Risk, resilience, and recovery*. Ithaca, NY: Cornell University Press.
- WHO. (2016). *Cancer*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs297/en/>
- Wolf, B. M. (2014). Do families cope communally with breast cancer, or is it just talk? *Qualitative Health Research*, 25, 320-335. doi:10.1177/10497323145
- Yoo, G. J., Levine, E. G., & Pasick, R. (2014). Breast cancer and coping among women of color: A systematic review of the literature. *Supportive Care in Cancer*, 22(3), 811-824. doi:10.1007/s00520-013-2057-3



## APPENDIX A

### English Biographical Questionnaire

All information in this questionnaire is strictly confidential and your information will be processed anonymously. Please tick  the box most appropriate to you, or complete the statement in the space provided:

#### **Participant/Your personal information:**

1. Living in (town/suburb): \_\_\_\_\_

2. Age: \_\_\_\_\_

3. Race:

Black	Coloured	Indian	White	Other
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5. Home language:

English	Afrikaans	isiXhosa	Other
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6. Highest level of education:

N o n e	Gr 1	Gr 2	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 10	Gr 11	Gr 12	Diplom a	Degree
	Sub A	Sub B	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Std 7	Std 8	Std 9	Std 10		

7. How long ago were you diagnosed with breast cancer?

1-2 years ago	2-4 years ago	4-5 years ago	More than 5 years ago
---------------	---------------	---------------	-----------------------

8. What stage of breast cancer were you diagnosed with?

Stage 2	Stage 3
---------	---------

9. Are you currently employed?

Yes	No
-----	----

10. Do you receive government funding?

No	Disability grant	Pensioners fund
----	------------------	-----------------

11. Does your immediate family know about your breast cancer diagnosis?

Yes	No
-----	----

**Your family composition:**

1. Please tick  the box that best describes your current marital status

Single	Married	Living with an intimate partner/ girlfriend/boyfriend/fiancé	Cohabiting	Divorced	Widowed
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2. If you crossed the “married” box, please answer the following:

How many times had you been married? \_\_\_\_\_

For how long have you been married to your current partner? \_\_\_\_\_ years

3. How many children under the age of 18 live in your home? \_\_\_\_\_

For each of the children in your home, please try to fill the following box with appropriate information:

	Age	Gender <i>(Male / Female)</i>	Relationship to patient (you) <i>(Grandchild / Child etc.)</i>
Child 1			
Child 2			
Child 3			
Child 4			
Child 5			
Child 6			

4. How many adults over the age of 18 live in your home? \_\_\_\_\_

For each of the adults in your home, excluding the patient (you), please try to fill the following box with the appropriate information:

	<b>Age</b>	<b>F/M</b>	<b>Highest level of education</b> <i>(None / Primary School / High School / Diploma / Degree / Other)</i>	<b>Employed</b> <i>(Yes/No/Disability grant/Pensioners fund)</i>	<b>Relationship to patient</b> <i>(Spouse / Child / Sibling, etc.)</i>
<b>Adult 1</b>					
<b>Adult 2</b>					
<b>Adult 3</b>					
<b>Adult 4</b>					
<b>Adult 5</b>					
<b>Adult 6</b>					

5. What is you and your family's (this includes all family members living with you) estimated gross household income per month? Please tick  the appropriate box:

No income	Less than R5 000	R5 001 – R10 000	R10 001 – R15 000	R15 001 – R20 000	More than R20 000
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## **APPENDIX B**

### **Interview Schedule**

The open-ended questions that were used in the interview.

- How did everyday normal life change for your family after your breast cancer diagnosis?
- What would you say helped your family to manage and adapt after your breast cancer diagnosis?

Examples of probing questions in order to elicit in-depth responses from the participants and to gain a better understanding of the information uncovered:

- Can you think of anything else that helped your family to cope or survive?
- What would you say helped your family deal with your diagnosis in everyday life?
- Please can you tell me a bit more about what you mean by that?
- Please can you give me an example of how that particular aspect helped your family to cope?
- What would you say helped your family get through the stressful time after the diagnosis?
- Can you please elaborate.

## APPENDIX C

### English Informed Consent Form



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#### PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

**TITLE OF THE RESEARCH PROJECT:**

Resiliency in Families with a Mother Diagnosed with Breast Cancer

**REFERENCE NUMBER:**

**PRINCIPAL INVESTIGATOR:** Nikita Naidoo

**ADDRESS:** 324 North Block, Upper East Side Hotel, Salt River

**CONTACT NUMBER:** 071351796

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff (Nikita Naidoo) or Dr Baatjes any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you choose not to participate, it will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the **Health Research Ethics Committee of Stellenbosch University** and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

***What is this research study all about?***

The aim of this study is to identify family qualities that helped the family to cope after the mother had been diagnosed with breast cancer.

***Where will the study be conducted? Are there other sites? Total number of participants to be recruited at your site and altogether.***

This study will take place at the Tygerberg Breast Clinic, located in room 69, 5th floor, Outpatient Department East Side.

***Explain, in participant-friendly language, what your project aims to do and why you are doing it?***

This research study is aimed at identifying, exploring and describing factors that helped your family to cope with the breast cancer diagnosis. When a mother is diagnosed with breast cancer it is seen as a family crisis and a major stressor for the family as a whole. A family crisis, such as being diagnosed with breast cancer can affect your family functioning and negatively impact relationships between family members. However, your family coping skills (family resilience) are helpful in stressful situations and may contribute to your family well-being. The identified coping skills (family resilience qualities) can be used in the future to help other families in a similar situation.

***Explain all procedures.***

If you volunteer to participate in this study, we will ask you to complete the following things:

➤ A Biographical Questionnaire

Bio-demographic information will be collected using a biographical questionnaire, with questions regarding your age, gender, home language, socioeconomic status, marital status and family composition. In addition, information will also be requested regarding the onset, duration and stage of your breast cancer diagnosis.

➤ Questionnaires

In an attempt to identify the factors that help families to cope with mothers diagnosed with breast cancer, it will be expected of you to complete a couple of questionnaires that will take you approximately 40 minutes.

➤ Qualitative Question

You will be asked to answer one open-ended question on the topic. The responses to this question will be recorded. The question focuses on the characteristics and/or resources that you think helped your family to cope with the breast cancer diagnosis. You are encouraged to be truthful and to use your own words and personal experiences when answering the question.

***Why have you been invited to participate?***

You have been invited to participate in this study as you match the following inclusion criteria

1. You are over the age of 18 and have a family
2. You have been diagnosed with stage 2 or 3 breast cancer;
3. The diagnosis was made at least one year previously;
4. You are fluent in English or Afrikaans.

***What will your responsibilities be?***

It is expected of you to answer the open-ended question (about the qualities that helped your family to cope) in as much detail as possible. Furthermore, you will have to complete (if necessary, with assistance from others) a few questionnaires. In total, this whole process should take approximately one hour.

***Will you benefit from taking part in this research?***

There are no direct benefits for participating in this study. However, you may discover that you and your family have resources and qualities that you have not previously thought about. You will not receive any compensation for being part of this research study. By taking part in this study, you will aid in the understanding of resilience factors utilised by families with a mother who has been diagnosed with breast cancer. This understanding may bring us one step closer to the development of specialised training programmes targeting these families.

***Are there any risks involved in your taking part in this research?***

There are no risks involved regarding your physical well-being. Although this study will focus on positive aspects of your family, being diagnosed with breast cancer is a distressing experience. If you experience any distress during or after meeting with the researcher, we will encourage you to contact Reach for Recovery (R4R). R4R is a non-profit organisation for

people with breast cancer. It provides support services on a national basis, through well-selected and trained volunteers. This service is done at no charge to you and is available to any woman who requests it.

Reach for Recovery Contact details:

Website: <http://www.reach4recovery.org.za/>

Telephone: Michele Coe 084 990 6656 – Western Cape representative

Facebook Page: <https://www.facebook.com/Reach4RecoverySA>

***Who will have access to your medical records?***

The information collected from medical records will be treated as confidential and will be protected. If it is used in a publication or thesis, your identity will remain anonymous. Only the primary researcher involved in this study and Dr Baatjes will have access to your medical records.

***Will you be paid to take part in this study and are there any costs involved?***

There is no compensation for taking part in the study. There will be no costs involved for you.

***Is there anything else that you should know or do?***

- You can contact **Dr Karin Baatjes** at 021 938-9273 if you have any further queries or encounter any problems.
- You can contact the Health Research Ethics Committee at 021-938 9207 if you have any concerns or complaints that have not been addressed adequately by your study doctor.
- You will receive this copy of this information and consent form for your own records.



**TITLE OF THE RESEARCH PROJECT:** Resiliency in Families with a Mother Diagnosed with Breast Cancer

**REFERENCE NUMBER:** S15/10/217

**PRINCIPAL INVESTIGATOR:** Nikita Naidoo

**ADDRESS:** 31 Brickfield, Upper East Side Hotel, Salt River

**CONTACT NUMBER:** 071351796

**Declaration by participant**

By signing below, I, ....., agree to take part in a research study entitled: Resiliency in Families with a Mother Diagnosed with Breast Cancer

I declare that:

- I have read or had read to me this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been answered adequately.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished if the study doctor or researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

•  
Signed at Tygerberg Hospital on ..... 2016.

.....

**Signature of participant**

.....

**Signature of witness**

**Declaration by investigator**

I, Nikita Naidoo, declare that:

- I have explained the information in this document to .....
- I have encouraged him/her to ask questions and taken adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above

Signed at Tygerberg Hospital on .....2016.

.....

**Signature of investigator**

.....

**Signature of witness**

## APPENDIX D

### Health Research Ethics Committee Approval Letter



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18-Feb-2016 Naidoo, Nikita N

### Approval Notice    Response to Modifications- (New Application)

**Ethics Reference #: S15/10/217    Title: Resiliency in Families with a Mother Diagnosed with Breast Cancer.**

Dear Ms Nikita Naidoo,

The **Response to Modifications - (New Application)** received on **18-Jan-2016**, was reviewed by members of **Health Research Ethics Committee 1** via Expedited review procedures on **18-Feb-2016** and was approved. Please note the following information about your approved research protocol:

Protocol Approval Period: **18-Feb-2016 -17-Feb-2017**

Please remember to use your **protocol number (S15/10/217)** on any documents or correspondence with the HREC concerning your research protocol. Please note that the HREC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or

monitor the conduct of your research and the consent process.

#### **After Ethical Review:**

Please note a template of the progress report is obtainable on [www.sun.ac.za/rds](http://www.sun.ac.za/rds) and should be submitted to the Committee before the year has expired. The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit. Translation of the consent document to the language applicable to the study participants should be submitted.

Federal Wide Assurance Number: 00001372 Institutional Review Board (IRB) Number: IRB0005239

The Health Research Ethics Committee complies with the SA National Health Act No. 61 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 Part 46. This committee abides by the ethical norms and principles for research,

established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

### **Provincial and City of Cape Town Approval**

Please note that for research at a primary or secondary healthcare facility permission must still be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Contact persons are Ms Claudette Abrahams at Western Cape Department of Health ([healthres@pgwc.gov.za](mailto:healthres@pgwc.gov.za) Tel: +27 21 483 9907) and Dr Helene Visser at City Health ([Helene.Visser@capetown.gov.za](mailto:Helene.Visser@capetown.gov.za) Tel: +27 21 400 3981). Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics

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approval is required BEFORE approval can be obtained from these health authorities.

We wish you the best as you conduct your research. For standard HREC forms and documents please visit: [www.sun.ac.za/rds](http://www.sun.ac.za/rds)

If you have any questions or need further assistance, please contact the HREC office at 0219389657.

### **Included Documents:**

CV N Naidoo Declaration A Greeff CV C Carmin Declaration C Jansen van Vuuren  
Application form CV A Greeff Checklist Protocol Consent  
form Budget Declaration N Naidoo Protocol Synopsis

Sincerely,

Franklin Weber HREC Coordinator Health Research Ethics Committee 1

## APPENDIX E

### Permission letter from Tygerberg Academic Hospital to conduct research



TYGERBERG HOSPITAL  
REFERENCE: **Research Projects**  
ENQUIRIES: **Dr GG Marinus**  
TELEPHONE: **021 938 5752**

Ethics Reference: **S15/10/217**

**TITLE:** Resiliency in Families with a Mother Diagnosed with Breast Cancer.

Dear Ms Naidoo, Nikita

#### **PERMISSION TO CONDUCT YOUR RESEARCH AT TYGERBERG HOSPITAL.**

1. In accordance with the Provincial Research Policy and Tygerberg Hospital Notice No 40/2009, permission is hereby granted for you to conduct the above-mentioned research here at Tygerberg Hospital.
2. Researcher needs to ensure that participants have access to adequate/appropriate counselling when needed during application of research methodology.
3. Researchers, in accessing Provincial health facilities, are expressing consent to provide the Department with an electronic copy of the final feedback within six months of completion of research. This can be submitted to the Provincial Research Co-Ordinator ([Health.Research@westerncape.gov.za](mailto:Health.Research@westerncape.gov.za)).

  
**DR GG MARINUS**  
**MANAGER: MEDICAL SERVICES [RESEARCH CO-ORDINATOR]**

  
**DR D ERASMUS**  
**CHIEF EXECUTIVE OFFICE**

**Date:** 6 May 2016


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**TYGERBERG HOSPITAL**

Ethics Reference: S15/10/217

**TITLE:** Resiliency in Families with a Mother Diagnosed with Breast Cancer.

BY   
An authorized representative of Tygerberg Hospital

NAME Dr DS Erasmus

TITLE CEO

DATE 6 May 2016

## APPENDIX F

### Afrikaans Biografiese Vraelys

Alle inligting in hierdie vraelys is streng vertroulik en jou inligting sal anoniem verwerk word. Merk  asseblief die boksie wat die meeste van toepassing is op jou, of voltooi die stelling in die spasie wat verskaf word:

Deelnemer/Jou persoonlike inligting:

1. Ek bly in (dorp/stad): \_\_\_\_\_

2. Ouderdom: \_\_\_\_\_

3. Ras:

Swart	Kleurling	Indies	Blanke	Ander
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5. Huistaal:

Engels	Afrikaans	isiXhosa	Ander
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6. Hoogste vlak van opvoeding:

Ge	Gr 1	Gr 2	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 10	Gr 11	Gr 12	Diploma	Graad
en	Sub A	Sub B	St 1	St 2	St 3	St 4	St 5	St 6	St 7	St 8	St 9	St 10		

7. Hoe lank terug is jy gediagnoseer met borskanker?

1-2 jaar terug	2-4 2 jaar terug	4-5 2 jaar terug	Meer as 5 jaar terug
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8. Met watter stadium van borskanker is jy gediagnoseer?

Stadium 2	Stadium 3
-----------	-----------

9. Het jy tans 'n werk?

Ja	Nee
----	-----

10. Ontvang jy 'n ongeskiktheidstoelaag?

Ja	Nee
----	-----

11. Is jou familie bewus van jou borskanker diagnose?

Ja	Nee
----	-----

12. Het jy die afgelope maand ervaar dat jy af, depressief of moedeloos voel?

Ja	Nee
----	-----

13. Het jy die afgelope maand ervaar dat jy min belangstelling of genot vind daarin om dinge te doen nie?

Ja	Nee
----	-----

**Jou familie samestelling:**

1. Merk  asseblief die boksie wat jou huidige huwelikstatus die beste beskryf:

Enkelopend	Getroud	Lewe met 'n maat/vriendin/vriend/verloofde	Saamwonend	Geskei	Weduwee
------------	---------	--	------------	--------	---------

2. Indien jy die “getroud” boksie gemerk het, beantwoord asseblief die volgende:

Hoeveel keer was jy al getroud? \_\_\_\_\_ En jou maat? \_\_\_\_\_

Vir hoe lank is jy al getroud met jou huidige maat? \_\_\_\_\_ jaar

3. Hoeveel volwassenes bo die ouderdom van 18 woon in jou huis? \_\_\_\_\_

Vir elke volwassene wat in jou huis woon, uitsluitend die pasiënt (jy), voltooi asseblief die volgende boksie met die toepaslike inligting:

Ouderdom	Geslag (Manlik/ Vroulik)	Vlak van opvoeding (Geen / Laerskool / Hoërskool / Diploma / Graad / Ander)	Het hy/sy 'n werk? (Ja/Nee)	Verhouding met pasiënt (Eggenoot / Kind / Broer / Suster, ens.)

<b>Volwassene 1</b>					
<b>Volwassene 2</b>					
<b>Volwassene 3</b>					
<b>Volwassene 4</b>					
<b>Volwassene 5</b>					
<b>Volwassene 6</b>					

4. Hoeveel kinders onder die ouderdom van 18 woon in jou huis? \_\_\_\_\_

Vir elk van die kinders onder die ouderdom van 18 wat in jou huis woon, voltooi asseblief die volgende boksie met die toepaslike inligting:

	<b>Ouderdom</b>	<b>Geslag</b> <i>(Manlik/Vroulik)</i>	<b>Verhouding met pasiënt</b> <i>(Kleinkind /Kind ens.)</i>
<b>Kind 1</b>			
<b>Kind 2</b>			
<b>Kind 3</b>			
<b>Kind 4</b>			
<b>Kind 5</b>			
<b>Kind 6</b>			

5. Wat is jou en jou familie (dit sluit alle familielede wat saam met jou bly in) se beraamde bruto inkomste per maand? Merk  asseblief die gepaste boksie:

Geen inkomste	Minder as R5 000	R5 001 – R10 000	R10 001 – R15 000	R15 001 – R20 000	Meer as R20 000
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## APPENDIX G

### Afrikaans Informed Consent Form



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY  
jou kennisvenoot • your knowledge partner

#### DEELNEMER INLIGTINGSPAMFLET EN TOESTEMMINGSVORM

**TITEL VAN DIE NAVORSINGSPROJEK:**

Veerkrachtigheid in Families met Moeders Gediagnoseer met Borskanker

**VERWYSINGSNOMMER:**

**HOOFNAVORSER:** Nikita Naidoo

**ADRES:** 324 North Block, Upper East Side Hotel, Salt River

**KONTAKNOMMER:** 071351796

Jy word uitgenooi om deel te neem in 'n navorsingsprojek. Neem asseblief 'n oomblik om die informasie wat hier aangebied is deur te lees, wat die besonderhede van hierdie projek verduidelik. Vra asseblief vir die studiepersoneel (Nikita Naidoo) of Dr Baatjes indien daar enige deel van hierdie projek is wat jy nie verstaan nie. Dit is baie belangrik dat jy ten volle tevrede is dat jy duidelike begrip het vir wat hierdie navorsing behels en hoe jy betrokke kan wees. Eweneens, is jou deelname totaal vrywillig en jy kan weier om deel te neem. Indien jy besluit om nie deel te neem, sal dit hoegenaamd nie vir jou nadelig beïnvloed nie. Jy kan ook enige tyd gedurende die studie onttrek, selfs as jy reeds ingestem het om deel te neem.

Hierdie studie is goedgekeur deur die **Gesondheid Navorsingsetiekkomitee van Universiteit Stellenbosch** en sal die etiese riglyne en beginsels van die internasionale Verklaring van Helsinki, die Suid-Afrikaanse Riglyne vir Goeie Kliniese Praktyke en die Mediese Navorsingsraad (MNR) se Etiese Riglyne vir Navorsing, implementeer.

### ***Waaroor gaan hierdie studie?***

Die doel van hierdie studie is om familie eienskappe te identifiseer wat die familie gehelp het om die moeder se borskanker diagnose te hanteer.

### ***Waar sal hierdie studie plaasvind? Is daar enige ander plekke? Totale aantal deelnemers wat hier verwerf sal word.***

Hierdie studie sal plaasvind by die Tygerberg-borskliniek, in kamer 69, 5de vloer, Buitepatiënt Departement, Oostekant.

### ***Verduidelik, in deelnemer-vriendelike taal, wat jou studie poog om te doen en hoekom jy dit doen.***

Hierdie navorsingstudie beoog om veerkrachtigheidsfaktore in families met moeders gediagnoseer met borskanker te identifiseer, te verken en te verduidelik. Wanneer 'n moeder gediagnoseer word met borskanker, word dit beskou as 'n familiekrisis en as 'n groot stressor vir die familie as 'n geheel. 'n Familiekrisis kan familiefunksionering belemmer en die verhoudings tussen familielede negatief beïnvloed. Ten spyte daarvan kan familieveerkrachtigheid nadelige omstandighede teenwerk en bydra tot familiewelstand. Die geïdentifiseerde familieveerkrachtigheidsfaktore kan gebruik word om ander families in soortgelyke omstandighede in die toekoms te help.

### ***Verduidelik alle prosedures.***

Indien jy instem om deel te neem in hierdie studie, sal jy gevra word om die volgende te voltooi:

#### ➤ 'n Biografiese vraelys

Bio-demografiese inligting sal versamel word deur gebruik te maak van 'n biografiese vraelys, met vrae verwant aan jou ouderdom, geslag, huistaal, sosio-ekonomiese status, huwelikstatus en familiesamestelling. Daarbenewens, sal inligting ook versoek word ten opsigte van die aanvang, duur en stadium van jou borskanker diagnose.

#### ➤ Vraelyste

In 'n poging om faktore te identifiseer wat families help om moeders se borskanker diagnose te hanteer, sal daar van jou verwag word om 'n paar vraelyste, wat ongeveer 40 minute sal neem, te voltooi.

➤ Kwalitatiewe vraag

Jy sal gevra word om een oop-einde vraag verwant aan die onderwerp te beantwoord. Die antwoorde op hierdie vraag sal aangeteken word. Die vraag fokus op die eienskappe en/of hulpbronne wat jy dink jou familie gehelp het om die borskanker diagnose te hanteer. Jy word aangemoedig om eerlik te wees en jou eie woorde en ervarings te gebruik wanneer jy die vraag beantwoord.

***Hoekom is jy uitgenooi om deel te neem?***

Jy is uitgenooi om deel te neem in hierdie studie omdat jy voldoen aan die volgende insluitingskriteria van hierdie studie:

5. Jy is ouer as 18 en het 'n gesin;
6. Jy is gediagnoseer met stadium 2 óf stadium 3 borskanker;
7. Die diagnose het ten minste een jaar gelede plaasgevind;
8. Jy is vlot in Engels of Afrikaans.

***Wat sal jou verantwoordelikhede wees?***

Daar word van jou verwag om die oop-einde vraag in diepte te beantwoord (aangaande die eienskappe wat jou familie help om die diagnose te hanteer). Verder, sal jy 'n paar vraelyste moet voltooi (indien nodig, met bystand van ander). In totaal, sal hierdie hele proses ongeveer 'n uur duur.

***Sal jy baat deur deel te neem in hierdie navorsing?***

Daar is geen direkte voordele vir deelname in hierdie studie nie. Nietemin, jy mag dalk ontdek dat jy en jou familie het hulpbronne en eienskappe waaraan julle nie van te vore gedink het nie. Jy sal geen vergoeding ontvang vir jou deelname in hierdie navorsingstudie nie. Deur om deel te neem in hierdie studie, sal jy bydra tot die beter begrip van veerkragtigheidsfaktore wat gebruik word in families waar moeders gediagnoseer is met borskanker. Hierdie begrip kan ons een stap nader bring aan die ontwikkeling van gespesialiseerde opleidingsprogramme vir hierdie teikenfamilies.

***Is daar enige risiko's betrokke in jou deelname in hierdie studie?***

Daar is geen risiko's betrokke ten opsigte van jou fisiese welstand nie. Alhoewel hierdie studie op die positiewe aspekte van jou familie sal fokus, is dit steeds 'n bedroewende ervaring om gediagnoseer te wees met borskanker. Indien jy enige angstigheid ervaar tydens

of na jou ontmoeting met die navorser, moedig ons jou aan om Reach for Recovery (R4R) te kontak. R4R is 'n nie-winsgewende organisasie vir borskanker wat ondersteuningsdienste, deur middel van goed opgeleide vrywilligers, op 'n nasionale vlak verskaf. Hierdie diens word verskaf teen geen koste nie en is beskikbaar aan enige vrou wat dit versoek.

Reach for Recovery kontakbesonderhede:

Webblad: <http://www.reach4recovery.org.za/>

Telefoon: 084 990 6656 (Michele Coe – Wes-Kaapse verteenwoordiger)

Facebook-blad: <https://www.facebook.com/Reach4RecoverySA>

### ***Wie sal toegang hê tot jou mediese rekords?***

Die inligting wat van die mediese rekords versamel word sal beskerm word en as vertroulik behandel word. Indien dit gebruik word in 'n publikasie of 'n tesis, sal jou identiteit anoniem bly. Slegs die hoofnavorser betrokke by hierdie studie en Dr Baatjes sal toegang hê tot jou mediese rekords.

### ***Sal jy betaal word om deel te neem in hierdie studie en is daar enige koste verbonde?***

Daar is geen vergoeding vir deelname in hierdie studie nie. Daar sal geen koste verbonde wees vir jou om deel te neem nie.

### ***Is daar enige iets anders wat jy moet weet of doen?***

- Jy kan vir **Dr Karin Baatjes** kontak by 021 938-9273 as jy enige verdere navrae het of enige probleme ervaar.
- Jy kan die Gesondheid Navorsingsetiëkkomitee kontak by 021-938 9207 as jy enige kommernisse of klagtes het wat nie voldoende aangespreek is deur jou studiedokter nie.
- Jy sal 'n kopie van hierdie inligting en die toestemmingsbrief ontvang vir jou eie
- rekords.

**TITEL VAN DIE NAVORSINGSPROJEK:**

Veerkrachtigheid in Families met Moeders Gediagnoseer met Borskanker

**VERWYSINGSNOMMER:**

**HOOFNAVORSER:** Nikita Naidoo

**ADRES:** 324 North Block, Upper East Side Hotel, Salt River

**KONTAKNOMMER:** 071351796

**Verklaring deur deelnemer**

Deur om hieronder te teken, stem ek, ....., in om deel te neem in die navorsingstudie getiteld: Veerkrachtigheid in Families met Moeders Gediagnoseer met Borskanker.

Ek verklaar dat:

- Ek het die inligting en toestemmingsbrief gelees of iemand het hierdie inligting en toestemmingsbrief vir my gelees en dat dit in 'n taal geskryf is waarin ek vlot is of waarmee ek gemaklik is.
- Ek het die geleentheid gehad om vrae te vra en al my vrae is voldoende beantwoord.
- Ek verstaan dat deelname in hierdie studie is **vrywillig** en ek was nie onder druk geplaas om deel te neem nie. Ek mag kies om die studie enige tyd te verlaat en sal nie gepenaliseer of vooroordeel word in enige manier nie.
- Ek mag gevra word om die studie te verlaat voor dit voltooi is indien die studiedokter of navorser voel dit is in my beste belang, of as ek nie die afgerекende studieplan volg nie.

Geteken by Tygerberg Hospitaal op ..... 2016.

.....

**Handtekening van deelnemer**

.....

**Handtekening van getuienis**

**Verklaring deur ondersoeker**

Ek, Nikita Naidoo, verklaar dat:

- Ek die inligting in hierdie dokument aan ..... verduidelik het.
- Ek hom/haar aangemoedig het om vrae te vra en voldoende tyd geneem het om hierdie vrae te beantwoord.
- Ek is tevrede dat hy/sy alle aspekte van die navorsing verstaan, soos hierbo bespreek.

Geteken by Tygerberg Hospitaal op..... 2016.

.....

**Handtekening van ondersoeker**

.....

**Handtekening van getuie**

## APPENDIX H

### Excerpt from an Interview

<p><b>INTERVIEWER:</b> In your own words, what would you say helped your family cope, adapt, manage the breast cancer diagnosis?</p>	
<p><b>PARTICIPANT:</b> What helped my family coped during this difficult time of breast cancer?</p>	
<p><b>INTERVIEWER:</b> Yes. Yes.</p>	
<p><b>PARTICIPANT:</b> Was basically I think, what happened, we are very close, a close knit family and I think the fact that we already had to endure such a lot in the past five, six years and because of what we endured, actually when I heard I had breast cancer, it wasn't that bad. It all works. In 2010 I was sexually assaulted. I wanted to die.</p>	<p>Family connectedness close knit able rely on each other</p>
<p><b>INTERVIEWER:</b> Shame.</p>	
<p><b>PARTICIPANT:</b> I didn't want to live in this miserable world.</p>	<p>Feelings of isolation</p>
<p><b>INTERVIEWER:</b> It sounds horrible.</p>	
<p><b>PARTICIPANT:</b> And, although they found the man guilty after court case and work cases, I felt depressed and hopeless and I felt there's no life on this earth. I didn't want to be here but my husband and my kids helped me, even during that time. We've basically, I couldn't, I left work because I couldn't cope. I couldn't cope with me. I couldn't cope with that I had to go through. Eventually we ended up losing everything and we had to cope with that, not having food, not having an income, not having clothes, that kind of thing and not having a house and a car that we had before and that broke my family and my children were split up during this time. Both my boys had to stay by people. I went to stay by an elderly lady, my husband went to stay by his sister. So we, we were struggling during this time but because we were close knit we could, when we eventually came back together and the cancer came it was like nothing really. It was just a case that we knew, we went through the biggest trauma of our lives and this is nothing. God can handle this for us. We much, we were much stronger than what we were before and that's still how it is now. We know that with everything we went through, with the breast cancer. It's just a case of being there for one another and my kids; in the beginning it was</p>	<p>Left work to cope</p> <p>Family connectedness Close knit Positive reframing Positive outlook on life and the situation</p> <p>Faith in god Belief in god Spirituality</p> <p>A sense of being strong Support system</p>

<p>hard. I'm not saying it wasn't because even chemo was hard, you know not having hair, you know and feeling old like 70, 80 years, your body because of the chemo but I knew the day that I saw. When I came home and I saw my son standing in the, in my bedroom and he said to me, mom are you going to be ok and I said, yes I'm going to be ok, I'm just going to be fine. And just knowing that my, my son was scared of me dying gave me so much hope to live each day with praise.</p> <p><b>INTERVIEWER:</b> Wow.</p> <p><b>PARTICIPANT:</b> So, knowing that I had my husband and my children's support and that no, nothing could come between that. That kept me going you know, yes, there were times when I didn't have money for food and when you on chemo you have to eat healthy and, and I never had the support of people. I didn't know the structure of, what do you call it, the structure's that's put in place by certain, like CANSA or, or, by certain support groups that I wasn't aware of. So, I felt, at the time, there were times when I felt alone. I felt I need someone around me that can guide me or you know, talk to me about their experience and although that wasn't around I had to cope on my own. I had to deal with those emotions. There were days where I felt that I'm going to go crazy. I can't take this being alone because I'm alone in the flat, my husband is job hunting, my children is in, my one son is casualling at Checkers, my other son is in Matric. It was hard but I also knew that I'm not alone because I knew that God is giving me grace every day and that I'm so dependent on him for strength and here I am. I had my chemo, my hair grew back, I had radiation for about 30 days and even during the radiation times, there are times where you feel. There are times when you feel your throat is sore from the, [inaudible] so there are times when you feel you have a bit of, different kind of feelings: dry throat, coughing, you coughing and you not sure what to use. And you also, many times when a friend or someone you know in the group, support group dies, you don't really know what's awaiting you. So sometimes you are a bit scared, is it going to come back, am I going to go blind like the rest of my friends. But then having a day of grace you realise that you must only live for</p>	<p>Support from family members Feeling old</p> <p>A sense of being strong for her family/ children Positive communication Her family had given her a sense of hope to live. Family support kept her going.</p> <p>Close knit family Family support</p> <p>No money No food</p> <p>Feeling isolated with no one to talk too. She coped on her own.</p> <p>Spirituality Dependant on God for strength and hope.</p> <p>Expressing gratitude for each day.</p>
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<p>that day and do the best you can for that day and love someone that day, hug someone that day, tell someone you love them that day because that day is the day you have, because you are graced. You still alive, you still breathing and so tomorrow is another day. When you alive, you do tomorrow differently, better and that's how I had to cope. I had to decide I'm going to, if I want to win this battle, I have to run the race and if I've, if I'm going to give up I have to, then I have to give up but I decided because of my husband and my two boys, that I'm running this battle for myself and for them because they are my hope. They are the only people around me that's been my support structure for the past five, six years and without them I wouldn't have made it and definitely without God I wouldn't have made it. So I'm still running this race and I'm very excited about this race, being around people. Even having a, being part of Kuils River support group where we also speak to a lot of cancer patients who are sometimes giving up and you have to encourage them.</p> <p><b>INTERVIEWER:</b> Does encouraging them give you hope?</p> <p><b>PARTICIPANT:</b> Encouraging, just, just giving that word to them. It gives you also hope because you not only talking to them, you actually talking within yourself.</p> <p><b>INTERVIEWER:</b> Ok.</p> <p><b>PARTICIPANT:</b> And through yourself. There were times when I want to give up because we human but I always remind myself, this power of my mind. I had the right to, to put that power in action and to speak it over myself that I'm healed. Tomorrow I'm going to be ok, today am I going to be 100% but I'm ok. You have the power within you to speak over yourself healing and there were many a day that I felt so, not only my body was sore and in pain, but I felt this battle is not worth running and then I re-focused my mind and tell myself, no you are a survivor, you are worthy, you are powerful, you are beautiful, you can make it. So don't give up, never give up and that's where I get my hope from.</p> <p><b>INTERVIEWER:</b> Is this a philosophy that runs through your family?</p> <p><b>PARTICIPANT:</b> Yes. Yes because not having anything, we know that we should never give</p>	<p>Positive outlook, Hope for the future, Optimistic, Confidence in overcoming odds.</p> <p>Optimism, Hope Support from family Spiritual support from God.</p> <p>Community support</p> <p>Hope, Optimistic, confidence in overcoming the odds</p> <p>Hope, Optimistic confidence in overcoming the odds.</p>
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<p>up. Never give up hope, keep on believing, keep on trusting, keep on having faith. Things will work out. It might not today work out for you but try again tomorrow. Get up again, try again</p>	<p>Hope for the future Optimistic Positive outlook Confidence in overcoming the odds</p>
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