2019

# Posttraumatic Growth in Omani Women with Breast Cancer

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Abstract

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## Abstract

Researchers have begun to focus on how traumatic experiences, such as breast cancer, can lead to positive psychological outcomes or posttraumatic growth. However, the positive dimensions in Omani breast cancer survivors were not known because most research on posttraumatic growth has been conducted mainly in Western countries. The purpose of this phenomenological study was to explore the lived experiences of Omani women diagnosed and treated with breast cancer to understand posttraumatic growth in this population. Posttraumatic growth served as the theoretical foundation for the study and referred to positive experiences stemming from traumatic situations. The study included a convenience sample of 8 adult Omani women with histories of breast cancer. Data were collected through semi structured, in-depth interviews and was analyzed by thematic analysis technique. Color coding was done to point out the identified initial codes (35) and the codes were organized into 33 subthemes. Qualitative analysis of the data indicated 5 main themes of positive changes: greater appreciation of life, spiritual prosperity, improved interpersonal relations, empowerment and change in philosophy of life. Information from this study may contribute to Arab psychological literature on the personal growth of Arab women with breast cancer. In addition, the findings may lead to social change by helping practitioners diminish psychological debilities in Arab breast cancer survivors and inform interventions for Arab breast cancer survivors to develop coping skills to address future traumatic stress.

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# Dedication

I dedicate this work to the Creator, The Almighty God, and His Prophet. He is the one who motivated me in the choice of this topic, the one who guided my thought processes and choosing the questions, and the one who led me to the right people to cultivate the blueprint for this dissertation. He is the one who gave me encouragement, strength, and all I required along the process. I owe everything to God.

# Acknowledgments

There are some people essential to recognize. I want to thank Dr. Kathryn Dardeck, my dissertation chair, who gave me feedback throughout this process and encouraged me with her comments — comments that motivated me to keep going and her guidance with my writing skills. I also want to thank Dr. Medha Talpade and Dr. Amy Sickel, who are on my committee and were always willing to help me through this process. In addition to these individuals, I thank my husband, Kareem Shariff, and my parents who kept me going with their encouraging comments and their pride in my achievements. I am honored and blessed to have this beautiful family.

A countless debt of gratitude goes out to the gracious women who agreed to be part of this dissertation and who guided me along the way. Words cannot express my appreciation for their kindness and a warm welcome they offered me into a part of their lives.

Lastly, I would like to thank my editor, Lynn Fennis, who helped me immensely with the process of editing and who offered encouragement.

I believe without the support of these people I may not have completed this study.

Table of Content

# Chapter 1: Introduction to the Study

Breast cancer is the most common malignancy affecting women living in the Gulf Cooperation Council (GCC) countries with incidences higher in Bahrain and Qatar and lower in Kuwait, Saudi Arabia, United Arab Emirates, and Oman (Al-Moundhri, Al-Bahrani, Pervez, Gangul, & Nirmala, 2014). Breast cancer occurs mainly among women in their 40s and increases steadily with women in their late 40s in these Gulf countries (Agarwal et al., 2009). In 2014, the overall age standardized incidence rate of breast cancer in Oman was an average of 25.5 per 100,000 women, accounting for almost 24.8% of all cancer cases in Oman (Al lawati, AL lawati, Al Siyabi, AL Gharb, & AL Wehaibi, 2013).

Despite the prevalence of breast cancer in Oman, there have been improvements in the diagnosis, screening, and treatment of breast cancer. The 5-year survival of patients has increased from 48% to 84% (Moundhri et al., 2014). The rise in the survival rate of breast cancer patients in Oman has created the need to address the quality of life (QOL) and mental wellbeing of breast cancer survivors. However, no study has been conducted to explore the experiences of healing, wellness, and psycho-emotional growth in breast cancer survivors in Oman (Kumar et al, 2011). Tedeschi, Park, and Calhoun (1989) developed the construct of posttraumatic growth (PTG) to explain how trauma survivors attempt to create positive life changes in the wake of challenging and adverse experiences. Calhoun and Tedeschi (1989) posited five dimensions of PTG, including changes in relationships with other people, realization of new possibilities, increased personal strength, spiritual changes, and appreciation of life. These dimensions represent

the positive changes experienced by an individual during PTG and involve a sense of closeness with others, accepting support from others, realizing the expansiveness of an individual's innate strength, being open to opportunities that may not have been previously considered, and feeling connected to a higher being or power (Mols, Vingerhoets, Coebergh, & Van de Poll-Franse 2009; Tedeschi et al., 1989).

This study may fill the gap in the Arab literature on the experiences of PTG among Arab women who have survived breast cancer. Because an individual's reaction to any form of trauma is the parameter of his or her psychological functioning (Calhoun & Tedeschi, 2004), the data from this study may help to modify the Oman healthcare system to create interventional programs to facilitate PTG among breast cancer survivors. According to Calhoun, Tedeschi, and McMillan (2000), PTG occurs when individuals attempt to come to terms with traumatic events and rebuild their assumptive world. Individuals who have experienced stressful events can think about how they want to rebuild their lives. By considering the changed reality of breast cancer survivors in Oman, life circumstances, the complexity and fragility of the human condition, and the knowledge that they have survived breast cancer, Omani breast cancer survivors may develop beliefs that lead them to be more resilient in the face of future challenges. The results from this study may provide clinicians with information on the importance of positive psychological growth following breast cancer. If clinicians are familiar with the positive changes that can follow the breast cancer, they may assist their patients with understanding, coping, and adapting to their illness. If women experience growth

following their cancer, they may adjust better to their illness and may achieve more satisfaction from their life despite their experience with cancer.

The sections included in this chapter are the study's background, problem statement, purpose of the study, research questions, theoretical framework, nature of the study, and definitions of key concepts. The assumptions, limitations, delimitations, and significance of the study are also covered, followed by a summary and transition to Chapter 2.

## Background

Oman is a developing Asian country with an efficient health care system and free medical services to Omani nationals through the Ministry of Health, Muscat (Al-Sharbati & Hallas, 2012; Kumar, Al-Ajmi, & Al-Moundhri, 2011; Ministry of Health Publication, 2013). However, breast cancer is more common in Omani women compared to women in Western countries (Aziz, Iqbal, & Akram, 2008). Between 1998 and 2008, there were 96,173 cancer cases (45,250 males, 47,934 females) diagnosed in individuals among Gulf countries (Mohammed et al, 2008). Breast cancer was the most common form of cancer in almost all the GCC countries, representing 11.8% of all diagnosed cancers in both genders and 25.5% of the total female cancer cases (Al-Madouj et al., 2011). In Oman, according to the Ministry of Health (2014), the deadliness of breast cancer for men peaks at age 85+. It kills men at the lowest rate at ages 30-36 (Al Lawati et al., 2013). Women are killed at the highest rate from breast cancer at age 80+ (Al Lawati et al., 2013) Breast cancer was least lethal in women at ages 20-26 (Al Lawati et al., 2013). In 2012 and 2013, 53.5 deaths per 100,000 in Omani women were registered, and the mortality rate

for women with breast cancer was much higher than the rate for men, which was 8.4 per 100,000 in same year (Al Lawati et al., 2013). Therefore, I decided to conduct this study in Omani women with breast cancer due to increasing number of breast cancer cases and high mortality rates in women compared to men. Omani women also share a significant burden of breast cancer incidence and associated mortality. However, in comparison to the Western world, the majority of these female cancer patients are facing advanced cancer ailments (Stage III or IV) and are a decade younger than their counterparts in the Western population (Bouchra et al., 2016; Al-Moundhri, 2014).

Advanced cancer is common among cancer patients in developing Arab countries. According to the World Health Organization ([WHO] 2014), the number of breast cancer cases in the Middle East is lower than in the Western world. However, the death rates of women diagnosed with breast cancer are much higher in Middle Eastern countries (WHO, 2014). The WHO explained that Arab nations do not possess a culture of regular screening check-ups, which would ensure early detection and treatment of the cancer. In addition, Omani women have poor knowledge about breast cancer signs and symptoms, risk factors, personal risk, treatment options, and the importance of early detection (Al-Mahrooqi, 2010; Al-Azri et al., 2015). Middle Eastern Arab women tend to manifest a high-grade pathway in breast cancer development. Aldwin, Levenson, and Spiro (1994) compared breast cancer in Saudi Arabia and Switzerland, wherein 67% of Saudi female patients had Grade III tumors and only 33% were diagnosed with Grade III in Switzerland. Accordingly, Saudi women appeared to have nearly 15-fold lower risk for developing lower grade breast cancer than Swiss women (Andysz et al., 2015).

Nevertheless, further research is required to evaluate this finding in other Arab populations.

Breast cancer and its treatment negatively affect the QOL of patients' psychological, physical, social, and emotional domains of life. Arab women may experience poor emotional functioning because women with breast cancer in the Arab world experience not only the trauma of defacement, but also the fear of a loss of femininity and rejection by their partners (Ismail, Soubani, Nimri, & Al-Zeer, 2013). Effective social support systems in Arab communities play a role in improving health and reducing the psychological pressure of cancer. The experience of cancer in the Arab world in both male and female patients is usually influenced by religious and spiritual contexts characterized by support and solidarity (Ahmed et al., 2010). Researchers (Ahmad et al., 2010; Al Moundhri, 2014; Kagawa, 2011) have found that in Arab countries, family, community, faith, and respect for traditional medicine are three protective elements that the majority of the Arab population have in common. The family system plays a role in health care. Families may consider themselves as care providers for hospitalized and sick family members. According to Kagawa (2008), in the Arab world, religion contributes to the health and wellbeing of the patient, and patients find religion to be a source of solace from their illness. Hebert, Zdaniuk, Schulz, and Scheier (2009) indicated that positive religious coping methods predicted better mental health and life satisfaction in women with breast cancer.

Despite the late stage and early age presentation of breast cancer, there has been an improvement in 5-year (RFS) and the 5-year overall survival (OS) in Omani women

with breast cancer. This improvement in RFS and OS is the result of the use of various advanced treatment modalities, including updated chemotherapy and treatment protocols (Al-Moundhri et al., 2014). Despite the high prevalence of advanced breast cancer among women, the survival rates have significantly improved. The survival rate of Omani women with breast cancer is 78% in 2012 and 2013, compared to 64% between 1996 and 2002 (Al-Moundhri et al., 2014). The improved education among Omani citizens, particularly women, may also affect the improved breast cancer survival rate. Women are becoming more visible in educational institutions and employment in the country (Khaduri, 2007). For example, the literacy rate in Oman was 16% in 1985 and 68% in 2007(Khaduri, 2007). Ermiah et al. (2012) emphasized that education helps women to seek medical advice and to seek prevention modalities. These improvements in the survival rate of cancer patients in Oman call for more attention to the mental wellbeing and the QOL for the survivors of breast cancer (Al-Moundhri et al., 2014). Cancer diagnosis is a stressful experience that impacts a patient's life. Cancer-related complications and stress may lead to the experience of positive changes and PTG (Cordova & Andrykowski, 2007; Sears, Stanton, & Danoff-Burg, 2003; Stanton, Bower, & Low, 2006).

Researchers (Bouchra et al., 2016; Jassim & Whitford, 2014) who have studied QOL in breast cancer patients in Arab countries (including Bahrain, Kuwait, and Lebanon) revealed positive psychological changes in women after their breast cancer diagnosis and treatment. The gap in the scholarship that this study addressed was the lack of studies conducted in Gulf countries including Oman to explore the experience of

Omani women with breast cancer and if PTG contributed in their recovery process. This study may fill the gap in the medical Arab literature on breast cancer patients by investigating the lived experiences of Omani women with breast cancer and their perceptions of positive PTG following their breast cancer experiences. Evaluating PTG in the lives of Omani breast cancer survivors may offer insight about PTG that may enable healthcare providers to promote patients' wellbeing; reduce patient stress levels; and help patients better adapt to illness, while potentially building resilience

## Problem Statement

The traumatic nature of breast cancer has received attention over the last decades; cancer produces both positive and negative psychological effects (Chang, 2006; Chang, D'Zurilla, & Sanna, 2009). Women with breast cancer may feel uncertainty, fear, depression, and anxiety (Al-azri et al., 2015). Apart from adverse psychological experiences, traumatic events can also lead to positive changes (Chopko, 2010; Kleim & Ehlers, 2009; Linley & Joseph, 2004; Solomon & Dekel, 2007). These positive changes, including a greater appreciation of life, meaning-making, and positive outlook in relationships, have been described as PTG (Webb, 2013). Although it is critical to study distress following a breast cancer diagnosis, it is likewise important to study positive emotions and growth. According to Askay and Magyar-Russell (2009), focusing only on the negative experiences following breast cancer experience may lead to a biased interpretation of posttraumatic reactions and can unintentionally "cheat" patients out of the hope of making a consequential recovery.

Most literature on PTG has been conducted in Western countries (Kucukkaya, 2010) using Western cultural instruments that may not be applicable to the Omani Muslim populace due to cultural differences (Kumar et al, 2011). In studies on QOL in breast cancer patients in Arab countries, researchers have noted positive changes in women after their breast cancer diagnosis and treatment. There, however, has been no study on these changes in Oman (Diener, 2009; Jassim & Whitford, 2014). Considering the benefit of PTG awareness in mental health and the lack of empirical research on PTG in Oman, an empirical study on the experiences of Omani women with breast cancer and its associated changes could be carried out through qualitative research. Although PTG in breast cancer patients has been studied in Western countries, the concept of PTG is new in the Arab world, including Oman. Thus, it is not known how PTG may contribute to healing, growth, and wellness in breast cancer survivors in Oman.

According to existential philosophy, an individual transformative change can arise from distress (Frankl, 1984). Within clinical literature, however, the concept that trauma has the potential to lead to positive personal change and personal growth has only recently become accepted (Joseph & Linley, 2008; Tedeschi et al., 1989). According to Tedeschi and Calhoun (2004), PTG is an outcome of active coping with challenging circumstances in life, when the person gradually chooses to head in a new direction in life and accepts changes in life. Many social work models include human potential amidst adversity, including resilience, perspectives of strength, hardiness, solution-focused approaches, and empowerment (McMillen, 1999). Sears et al. (2003) also noted that more education, fewer social constraints, more invasive surgery, and perceptions of cancer may

be related to the occurrence of PTG among breast cancer patients. Receiving social support after diagnosis, employment status, self-disclosure of an illness, being married, and having children are additional factors that can serve as protective aspects against stress (Bellizzi & Blank, 2006; Silva, Moreira, & Canavarro, 2012). According to Calhoun and Tedeschi (2006), the five main domains of PTG found in research include changes in personal strength, appreciation for life, new possibilities, relating to others, and the spirituality. An action-based component might be essential to enrich the growth process (Hobfoll et al., 2007).

Breast cancer involves long-term multimodality treatment, side effects, and fear of recurrence, which can lead to psychosocial consequences and negative psychological reactions among patients (Carver & Antoni, 2004). Linley and Joseph (2004) noted that patients reported positive changes after breast cancer in recent decades, which has led to the need to conduct research on the positive effects of these traumatic events. More than 80% of women with breast cancer had experienced positive life changes and growth following this disease (Greenbank, 2003; Horgan, Holcombe, & Salmon, 2011). PTG is an individual's experience of positive changes arising from negative and stressful life events (Calhoun et al., 2000). This process allows the person to come to a higher functional level than before facing the trauma (Tokgoz et al., 2008). These positive experiences enable the patient to cope and adjust to a better way of life with his or her cancer diagnosis and treatment (Jassim & Whitford, 2010).

Awareness of the positive psychological changes experienced with challenging life situations is associated with numerous clinical applications. These changes are often

linked to mental health and the patients' survival, stress diminution, positive mood, compassion, lower anxiety, and health status improvement. Overall, patients live their lives more contented, empowered, and meaningfully (Frazier, Conlon, & Glaser, 2001; Mols et al., 2009; Simmen-Janevska, Brandstätter, & Maercker, 2012; Tallman, Altmaeir, & Garcia, 2007). Thus, the results of this study may assist healthcare practitioners in Oman to use these changes to train their patients to adjust to diagnosis and treatment of cancer.

## Purpose of the Study

The purpose of this qualitative study was to explore the experiences of Omani women diagnosed with breast cancer and to gain a better understanding of how PTG may contribute to healing and wellness in breast cancer survivors in Oman. An understanding of Omani women's perceptions of their QOL during treatment, as well as posttreatment, may offer insights that health care providers can use to promote patients' wellbeing, reduce patient stress levels, and help patients to better adapt to illness. In the literature on PTG (Bussell & Naus, 2010; Karanci & Erkam, 2007; Rajandram, Jenewein, McGrath, & Zwahlen, 2011), scholars have documented that positive changes may give positive meaning to the lives of cancer patient survivors, making them more compassionate, humble, and generous. Facilitating PTG in female breast cancer survivors in Oman may make them feel empowered and confident, which are components of personal growth.

Trauma survivors often discover new personal strengths and possibilities (Taku, Cann, Calhoun, & Tedeschi, 2009). Self-strengthening and self-discovery during the PTG process are triggered by survivors' struggles (Bower et al., 2005; Carver, Scheier, &

Weintraub, 1989; Linley & Joseph, 2004). Pain, suffering, and struggle may help to strengthen and teach individuals about their undiscovered strengths and potentials (Bower et al., 2005; Calhoun, Cann, Tedeschi, & McMillan, 2000; Tedeschi, Park, & Calhoun, 2004). Positive changes can lead to psychological preparedness (Tedeschi & Calhoun, 2004) and may teach Omani breast cancer survivors to confront subsequent challenges with effective coping skills and less anxiety. By collecting and analyzing the experiences of Arab women who may have experienced PTG, this study may provide information for future researchers in Oman to explore the concept of PTG and its application to breast cancer survivors.

## Research Questions

In this study, I investigated the following research questions:

1. During their cancer-free posttreatment period, what changes if any, took place in these Omani women's lives that they attribute to their breast cancer experience?
2. During their cancer-free posttreatment period, what were the qualities, if any, that these Omani women identified as essential for coping with breast cancer?
3. During their cancer-free posttreatment period, what experiences, if any, did these Omani women identify as indicators of personal growth?

## Theoretical Framework

The PTG developed by Tedeschi and Calhoun (1995) served as the theoretical foundation for this study. Researchers use PTG to understand how individuals can

experience emotional and psychological growth after trauma. Such growth can manifest in a number of ways, including fostering new relationships with others, developing a new appreciation for life, finding new meanings in life, discovering personal strength, experiencing spiritual change, and realizing new opportunities (Tedeschi & Calhoun, 1995). The level of distress experienced by an individual after a traumatic situation is not the variable that predicts the development or instigation of PTG (Cordova et al., 2001). The most important component of the development of PTG is that the event must shatter or shake the person's *assumptive world* and core beliefs (Janoff-Bulman, 1992). Assumptive world refers to individuals' general set of assumptions and beliefs about the world around them that helps them to comprehend the world and guide their actions (Janoff-Bulman, 1992). When there is no incidence of any traumatic event in the lives of individuals, they may believe that the world is safe and benevolent. Experiencing a disturbance in their assumptive world may spark the necessity for instigating cognitive processing of the traumatic experience. This process is called rumination (Lindstrom, Cann, Calhoun, & Tedeschi, 2013; Silva et al., 2012). According to PTG theory, an event must be upsetting enough to challenge the individual's goals, beliefs, and ability to manage distress, or produce changes in the individual's view of the world or self, in order for growth to occur. The event can be viewed as a *psychological earthquake* that destabilizes an individual's psychological foundation (Janoff-Bulman, 1992). Such cognitive processing in relation to PTG is focused less on the emotional process of enduring suffering and more on creating meaningful growth and the capability to adapt to future challenges of life. The idea is to enable positive thinking toward the traumatic

experience (Joseph & Linley, 2008). PTG and cognitive processing may contribute to understanding the experiences, as identified in the three research questions, of female Omani breast cancer survivors.

## Nature of the Study

I used the qualitative methodology to provide a rich collection of data regarding individuals' experiences following trauma. This research was designed to capture the complex experience of PTG in Omani women with breast cancer. Calhoun and Tedeschi (2008) opined that the qualitative approach allows the researcher to gather information without priming participants toward positive self-reports or forcing a choice between positive and negative outcomes. This study was exploratory and flexible to gain an understanding of the complex and subjective nature of posttraumatic experiences of Omani women with breast cancer by using the qualitative method of phenomenology. The phenomenological researcher mediates and interprets the participants' meanings and experiences so that they become the essence of the research phenomenon (Creswell, 2007). I conducted interviews with Omani women (above the age of 18) who had experienced breast cancer and had been treated and in remission for the last 2-5 years. According to Creswell (2013), in qualitative research, the sample size is not generally predetermined. The number of participants in the study depends upon the number required to complete the essential elements of the concepts being studied. The sample size is sufficient when additional interviews do not result in the recognition of new themes; this is referred to as data saturation in qualitative research. For this study, however, I decided on a sample size of eight participants based on the guidelines

recommended by Guest, Bunce, and Johnson (2006), who recommended a minimum of five to six participants for qualitative research. Additionally, the size of an appropriate and acceptable sample is dependent on the homogeneous nature of the sample relative to the research study (Leedy & Ormrod, 2005). A more homogeneous population entails a smaller sample than a more heterogeneous population (Leedy & Ormrod, 2005). This study's participants were a homogeneous population; all participants have had a diagnosis of breast cancer and thus shared the experience of breast cancer.

Caldwell et al. (2005) suggested that researchers must be sensitive to the values of the community. The general Omani population that I worked with have values that I respect and understood to build a trusting relationship with the participants. The participants were selected from the breast cancer survivor population through the use of purposive sampling and the snowball technique. Purposive sampling was appropriate for this study because data from a particular group were required, and participant selection was based on characteristics that the participants possess. In the snowball technique, the participants suggest other potential individuals who may be interested in participating in the study (Nelson & Allred, 2005). Potential participants were contacted initially by phone in order to explain the purpose of the study and to make sure that the participants met the inclusion criteria for this study. The qualitative data analysis technique that was used in this study was thematic content analysis. Content analysis is a qualitative research technique (Weber, 1990) that includes three approaches: conventional, directed, or summative. All three approaches are used to interpret meaning from the content of text data, and they adhere to the naturalistic paradigm (Schilling, 2006). I chose a directed

approach to content analysis for this study because prior research already existed about the phenomenon of PTG to guide the research questions and focus of the research. The interview transcripts were read and reread separately for coding and identifying the themes. The transcripts were analyzed and interpreted using thematic content analysis, which consists of coding the data, forming the themes, shaping and defining the codes and themes, and interpreting the results (Wong, 2008).

## Definitions

*Allah*: The Arabic word for God used by Muslims only.

*Benefit finding:* Benefit finding refers to the process of realizing the gains or positive outcomes stemming from experiencing adversity (Michael & Snyder, 2005). Benefit finding was initially used as a point of reference by Cadell, Regehr, and Hemsworth (2003), where it was a component of one of their investigative instruments used in the assessment of positive changes after adverse life experiences.

*Cancer survivor:* This term began as a relevant proposition that individuals could refer to themselves as survivors from the time diagnosis of their condition through the remaining days of their lives, despite whether their eventual deaths were linked to the cancer or not.

*Positive cognitive processing:* Cognitive processing is defined by Bower, Kemeny, Taylor, and Fahey (1998) as the process of actively thinking about a stressor, the thoughts and feelings it arouses, and the implications for a person's life and future. Positive cognitive processing is an aspect in the growth process (Calhoun, Cann, Tedeschi, & McMillan, 2000; Helgeson, Reynolds, & Tomich, 2006; Linley & Joseph,

2004; Tedeschi & Calhoun, 1995; Wright, Crawford, & Sebastian, 2007). Cognitive processes are normally initiated to make sense of and grow from traumatic experiences.

*Psychological stress:* Psychological stress is a form of cognitive tension that is characterized by negative thoughts and emotions that occur when a person believes that he or she does not have the ability to deal with perceived demands (Hawthorne et al., 2011 ).

*Religious coping strategies:* Religious coping strategies are methods or tactics used to preserve or develop a coherent relationship with God or a higher religious power and to ask for favor or guidance when coping with stressful life situations (Hawthorne, Youngblut, & Brooten, 2011). Religious coping strategies can involve forms of worship services and prayers (Hawthorne et al., 2011).

*Rumination:* Rumination refers to the act of repeatedly thinking about a traumatic event (Janoff-Bulman, 1992), and it is a pattern of negative thinking when it involves distressing, intrusive, and unwanted thoughts. However, the term rumination used in PTG research often indicates repetitive thinking that is a purposeful, reflective, and deliberate examination of the event (Lindstrom, 2013; Tedeschi, Park, & Calhoun, 2004).

*Stress-related growth:* Stress-related growth refers to the positive changes that occur after the occurrence of a negative life event and has been used to refer to research ventures that have been used in the Stress Related Growth Scale (SRGS) to investigate defined objectives (Park, 2010).

*Traumatic life event:* Traumatic life events refer to individuals having witnessed, experienced, or been confronted with threat of death or serious injury, which produced horror, fear, or helplessness (American Psychiatric Association, 2000).

*Traumatic stress:* This is a type of stress that is featured by posttraumatic stress symptoms as they present after a traumatic life experience (Park, 2010). It is usually measured by an instrument that assesses posttraumatic stress disorder (PTSD) symptoms.

## Assumptions

Assumptions are components of research that are outside of the control of the researcher and are accepted as true (Simon, 2011). In this study, I assumed that to retrieve the most significant information from the participants, I should use the qualitative method of study. I assumed that a quantitative approach would not provide all the nuances that may be useful to further understand the PTG topic in this setting. I also assumed that after being informed of the scholarly nature of the study, as well as the confidentiality and anonymity of responses, the participants would answer honestly. In addition, I assumed that the study participants were referring to the actual experiences of surviving breast cancer. Lastly, I assumed that the participants had a sincere interest in participating in the study without any material reward in the form of money.

## Scope and Delimitations

The delimitations of a study are those characteristics in a study that limit the scope and define the boundaries of the study (Patton, 2002). The delimitations are in control of the researcher. I included many delimitations in this study that may affect the generalizability of the results of the study. First, I included a small sample mainly from

the Muscat region , even though I understand that there are other Omani women with the breast cancer experience living outside of the Muscat region. Enlisting participants through the snowball method and personally conducted all interviews was time consuming. Due to time constraints, I decided to involve Omani women mainly from the Muscat region. Triangulation of qualitative data may reduce the effect of this delimitation. With this small sample size, the results of the study may not generalize to other Omani women who were not living in the Muscat area. The women living in the Muscat region (due to education, urban life style, and easy access to healthcare) may have different experiences with breast cancer from those living in interior of the country. However, many of the traditions and experiences of illness between urban and rural Omani women are similar. It is hoped that the results may have some generalizability and may spur future study. Although the results of the study may not transfer to other populations as in quantitative studies, the intention of qualitative researchers is to gain an in-depth understanding of a phenomenon not possible through quantitative studies with large sample sizes. I used description to outline details about the participants, the context of the interviews, and the recruitment process to ensure transferability. In addition, I maintained and reviewed all field notes and transcripts multiple times and made sure to carefully document all of the raw data created to ensure confirmability of the study.

## Limitations

In qualitative research, the data should be evaluated with the noted biases of the researcher. To address and minimize my personal, I kept track of my emotions and attitudes in order to ensure that the results and interpretations represented the perceptions

and experiences of the participants. In qualitative research, researchers must bracket their personal beliefs and expectations while attempting to comprehend the lived experiences of participants without preconceived conceptions (Creswell, 2007). This process is similar to what Zen Buddhists call *beginner's mind*, which refers to seeing experiences as fresh, as if for the first time, without preconceived notions (Creswell, 2007). Another limitation concerned the participants who agreed to take part in this research. Some of the participants refused to participate in the study. This might affect the quality and depth of information extracted from the members of the sample population.

## Significance of the Study

When reviewing the literature on breast cancer in Oman, I found studies on the issues pertinent to breast cancer and medical treatment of breast cancer in the country, but no literature on PTG and its importance for breast cancer survivors. However, the escalation of breast cancer survival rates has captured the interests of researchers and health professionals (Agarwal et al., 2009) in an attempt to assess the impact of chronic diseases, specifically cancer, and the experience of recovery on patients' lives. This study was significant in that it may help to fill the gap in research on the subjective experience of Arab women who have survived breast cancer. As a person's reaction to trauma is an indicator of psychological functioning (Calhoun & Tedeschi, 2007), the results of this study may help Oman's healthcare professionals to design intervention programs to facilitate PTG in breast cancer patients and reduce their stress levels due to the cancer diagnosis. The implementation of PTG in the Oman health care system is important because most people who seek interventions desire to change for the better. Psycho-

traumatology intervention (a discipline that deals with prevention, treatment, and research in posttrauma victims) is considered mainly in the diminution of the severity of negative reactions (Simmen-Janevska et al., 2012). In these types of intervention, the regaining of the pretrauma level of functioning is considered an achievement. There are, however, cases of major trauma, such as some sorts of loss, that do not allow victims to return to their previous levels of functioning (Carver, 2010). In these cases, returning to life preevent is impossible. In these cases, the chance of change either for the better or the worse is high. If therapy stresses eliminating or reducing different types of dysfunction, the probability of "feeling better" then becomes high (Zoellner & Maercker, 2006). However, if therapists emphasize the possibility of growth based on the survivor's latent strengths, or developing the possibility of growth, the chances of getting better may increase in the long-run growth of the sufferer (Zoellner & Maercker, 2006). This approach might lower the risk of relapse in similar distress and conflicting situations, where the individual is not provided with instructions on how to react or is not aware of the potentials for different types of reactions (Zoellner & Maercker, 2006).

Awareness and development of the positive changes as a result of breast cancer and its treatment can improve a patient's mood, life satisfaction, and general health status and lead to a higher patient survival rate (Chopko, 2010; Kleim & Ehlers, 2009; Linley & Joseph, 2004; Solomon & Dekel, 2007). The development of positive feelings after breast cancer may help Omani breast cancer survivors to increase their general sense of wellbeing and reduce their stress levels. Furthermore, positive progress posttreatment can also enable psychological preparedness that may allow breast cancer survivors in Oman

to cope with subsequent traumas (Burney et al., 2011) that might otherwise be debilitating. The implementation of PTG should be targeted not only to the individual, but the society as well, which will involve changing cultural expectations and creating awareness in the Oman community and healthcare system that breast cancer may not only result in pain as documented in the Oman literature (Burney et al., 2011), but may lead to psychological and emotional growth, character development, and the recognition of unrealized personal strengths.

## Summary

The purpose of this qualitative study was to explore the experiences of Omani women diagnosed with breast cancer and to gain a better understanding of how PTG may contribute to healing and wellness in breast cancer survivors in Oman. PTG is a new phenomenon in Oman, and emerging constructs in the discipline of psychology necessitate the need for further elaboration. Positive growth with regard to breast cancer has been the basis of many studies. However, no study has been done in the Arab world to show the positive or desired changes manifesting in women with breast cancer. This study was designed to explore the experience and prevalence of positive changes among Omani women who are diagnosed with and treated for breast cancer. Chapter 2 will include an introduction, literature search strategy, discussion of the theoretical foundation, analysis and synthesis of studies on PTG, and a summary.

# Chapter 2: Literature Review

## Introduction

The purpose of this qualitative study was to explore the experiences of Omani women diagnosed with breast cancer and to gain a better understanding of how PTG may contribute to healing and wellness in breast cancer survivors in Oman. Many studies on PTG have been conducted in Western countries on Western populations (Kucukkaya, 2010) using Western cultural instruments, which may be not be applicable in the Omani Muslim populace due to cultural differences between the Arab and Western world (Kumar et al., 2011). Researchers who have studied QOL in breast cancer patients in Arab countries (including Kuwait, Bahrain, and Lebanon) indicated positive changes in women after their breast cancer diagnosis and treatment; however, no study has been conducted to explore these changes in Oman (Jassim & Whitford, 2014).

Due to the lack of scholarly research on PTG in Oman, I conducted a qualitative study on Omani women's experiences with breast cancer. An understanding of Omani women's perceptions of their QOL during treatment, as well as posttreatment, may offer insights to healthcare providers that may enable them to promote their patients' wellbeing, reduce patient stress levels, and help patients to better adapt to illness. In the current literature on PTG (Bussell & Naus, 2010; Karanci & Erkam, 2007; Rajandram et al., 2011), researchers have documented that positive changes may provide meaning to the lives of cancer patient survivors. Hence, understanding PTG in breast cancer survivors in Oman may lead to the facilitation of empowerment and confidence in survivors, which are components of personal growth (Calhoun & Tedeschi, 2006).

Chapter 2 contains the literature search strategy, the theoretical foundation, and a discussion and analysis of the scholarly literature on PTG. The chapter ends with a summary and a conclusion.

## Literature Search Strategy

A comprehensive search was conducted of several online databases accessed through the Walden Library portal to locate relevant material for this literature review. The databases search included Academic Search Premier, First Search, ProQuest Digital Dissertations, ProQuest, Medline, PubMed, SAGE, LexisNexis, EBSCO host, and Science Direct. The following search terms and combinations of terms were used to search for relevant material: *poor awareness levels*, *poor attitude*, *PTG*, *personal growth*, *breast cancer*, and *limited cancer knowledge*. No articles or literature discussing posttraumatic stress, PTG, and emotional adjustments could be found in Arab journals. To address this gap, I searched journals such as *The Journal of Health Psychology*; *The Journal of Psycho Oncology*; *Breast Cancer Research and Treatment Journal*; *The Journal of Loss and Trauma*; *The Journal of Traumatic Stress*; *Health Psychology Journal*; *The Australasian Journal of Disaster and Trauma Studies*; *Mental Health, Religion, & Culture*; *Social Science and Medicine*; *The Journal of Positive Psychology*; *Psychology and Health*; *The British Journal of Health Psychology*; *The Journal of Psychosocial Oncology*; and *The Journal of Interpersonal Violence*. Furthermore, preference was given to peer-reviewed articles published within 10 years of the anticipated graduation date of 2019.

## Theoretical Foundation

The theory of PTG (Tedeschi & Calhoun, 2004) served as the theoretical foundation for the study. PTG refers to positive changes that individuals experience as they rise to higher levels of psychological functioning following adverse and challenging experiences (Tedeschi & Calhoun, 2004). People hold beliefs and assumptions about the world that influences how they live; these beliefs and assumptions involve the benevolence, controllability, and the predictability of the world (Tedeschi & Calhoun, 2004). However, a traumatic event may cause individuals to doubt the validity of their belief systems and the reason for their existence (Calhoun, Cann, & Tedeschi, 2010). A traumatic event can be thought of as a psychological earthquake that destabilizes and disrupts individuals' belief systems and psychological foundations (Janoff-Bulman, 1992). However, as individuals move on from traumatic events, they may experience change, and through the process of recovery, may discover positive characteristics and strengths that they can apply to their current lifestyles. Individuals who understand and apply these positive characteristics and strengths grow psychologically (Janoff-Bulman, 2006). After the crisis, people sometimes become stronger with better qualities compared to pretrauma (Lindstrom et al., 2013). Hart, Vella, and Mohr (2008) documented that many survivors experienced a heightened level of compassion toward others who have experienced similar or relatable suffering. This is drawn from the trauma they undergo dealing with their own pain. A greater sense of self is also reported among individuals who have undergone traumatic experiences (Hart et al., 2008).

Stronger and better qualities post trauma are also common among survivors. Christopher Reeve, who acted as a superhero in various films, is a prime example of this result. Due to a tragic equestrian accident, he was left a quadriplegic. He underwent depression and even considered suicide; however, he fought through it and was a renowned advocate for individuals living with spinal cord injuries (Christopher and Dana Reeve Foundation, 1995). This greater perception of personal strength is accompanied by an understanding of the negative impact of trauma in the individual's life (Tedeschi & Calhoun, 2011), as well as individual vulnerability.

A factor in the growth process is the cognitive process (Calhoun, Cann, Tedeschi, & McMillan, 2000; Helgeson et al., 2006; Tedeschi & Calhoun, 2011; Wright et al., 2007). Once a person's worldview is disrupted, cognitive processes are triggered to piece together what was destroyed. Wright et al. (2007) found that 87% of women who have suffered sexual abuse displayed desirable traits resulting from their experiences; however, they were only able to do this by acknowledging, rather than ignoring, their suffering and pain. Around 87% of women who have survived sexual abuse exhibit traits such as resilience, strength, and determination as a result of their traumatic experience (Wright et al., 2007). Women who go through incidences such as assault not only are empowered through the trauma but are driven to participate in the eradication of such crimes. They do so by volunteering, participating in programs, or even professionally engaging in works to address acts of sexual violence at a cultural level. Additionally, going through such traumatic experience helps them to create clarity and priority in life. Intrusive memories that these women experienced, which may have been traditionally

understood as markers of distress, were indications of their coping process and of acknowledging and addressing the traumatic experiences (Wright et al., 2007).

Cognitive avoidance may initially help the trauma survivor to survive an otherwise overwhelming experience that cannot initially be processed because the trauma survivor does not yet have the coping tools to handle the memories of the trauma. In the immediate aftermath of a trauma, cognitive avoidance may the key to survival. Long-term cognitive avoidance may prove to hinder psychological growth, but short-term cognitive avoidance can be the difference between life and death for some (Wright et al., 2007). By continuously engaging in the cognitive avoidance process, a person is not able to engage the active cognitive processing, which is responsible for creating meaning, resolution, and integration (Wright et al., 2007). The ability of individuals to share their stories in social settings, such as in support groups, also encourages individuals to blend their trauma into their new life reality, actively processing the event, receiving love from those closest to them, and obtaining affirmation (Wright et al., 2007). This serves to provide hope and growth in survivors.

The steadiness and quality of relationships must be measured when determining the probability of growth. Marital conflicts prior to trauma may result in increased distress. On the other hand, the ability to self-disclose to others who have gone through similar traumatic experiences may provide hope for survivors. Tedeschi and Calhoun (2004) found that the relationship between growth and social support might be because of the "tolerance of distress that supports cognitive processing" (p. 12). As an outcome of the trauma, the individual not only comprehends the traumatic situation, but also focuses

on how to deal with loss and stress. Therefore, individuals might look for help and support from their friends and family (Tedeschi & Calhoun, 2011) and learn to accept the help given by others. Consequently, relationships may become more meaningful and valuable (Tedeschi & Calhoun, 2004) once the traumatic phase is addressed by survivors. Cancer patients undergoing treatment reported heightened sensitivity toward others, an increased level of self-expression, and an ability to achieve higher levels of intimacy with their loved ones due to their illness (Tedeschi & Calhoun, 2004). Many reported to have rekindled lost relationships and experienced more closeness with their spouses owing to the cancer (Tedeschi & Calhoun, 1998, 2004). By seeking physical, social, and emotional support and sharing their experience, most individuals are able to experience PTG and positive meaning (Calhoun & Tedeschi, 2004; Tedeschi & Calhoun, 1996, 2004). The posttrauma healing involves the individual dealing with the loss and stress attributed to the traumatic event. Going through a healing process ensures that the individual experiences self-disclosure about the negative experience. Consequently, the survivor is able to achieve a higher level of peace that comes with accepting support from his or her existing or new social network (Calhoun & Tedeschi, 2004).

Another significant facet of cognitive processing of trauma is cognitive restructuring, which involves a search for meaning (Davis, Nolen-Hoeksema, & Larson, 1998; Frankl, 1984; Tedeschi & Calhoun, 1995). According to the existential and cognitive theories, participants who survived trauma report experiencing greater PTG due to the cognitive processing of the trauma (Cordova & Andrykowski, 2007). The key aspects of cognitive processing are cognitive restructuring and searching for meaning,

which are common reactions to trauma (Cordova & Andrykowski, 2007). This entails finding meaning in the event, while maintaining the idea that life's meaning continues to exist despite the occurrence of the traumatic event. The search for meaning may be accelerated by an individual's spiritual beliefs (Schultz, Tallman, & Altmaier, 2010). Frankl (1984) explained that meaning continues to be possible even in the face of suffering. Frankl claimed that in the case of traumatic events where people cannot alter or change, change within the self is demanded. As a result of the cognitive reconstruction after dealing with the trauma, the victim learns a sense of vulnerability and understands that certain events cannot be controlled and predicted (Calhoun & Tedeschi, 2000). In recognition of the volatility of life events, individuals start changing the previous degree of importance assigned to certain events. The person starts to pay attention to events that were considered unimportant before the trauma (Tedeschi & Calhoun, 2004). The priorities of life changes, and life itself is appreciated (Lindstrom et al., 2013).

Researchers also have identified religion as a higher order schema that serves to aid in understanding the meaning of life, particularly when the events of life seem tragic and senseless (Schultz et al., 2010). Tragic events may be regarded as a part of God's will or may increase a victim's devoutness or religious participation. Religious schemas may be permanent and incorporate the possibility of distress. After trauma, religious people may have a more stable sense of purpose and value than their nonreligious counterparts (Tedeschi & Calhoun, 1995). However, researchers argued that PTG occurs when trauma has been experienced and a person's assumptive beliefs are shattered, which would not be the case if the individual had a coping capacity and a schema, such as those found in

religion (Tedeschi & Calhoun, 2004). Although religion provides victims with stability and a schema that incorporates the probability for suffering and an explanation for the suffering, these beliefs can prevent the process of PTG in victims. Individuals with coping methods through spirituality may not be sufficiently challenged by the trauma (Tedeschi & Calhoun, 2004).

Narrative and wisdom are facets of the PTG model, which refers to developing a linear life story that includes a person's traumatic experience (Tedeschi & Calhoun, 2011). Individuals at this stage have successfully developed meaning through their traumatic experiences and have constructed a narrative that entails interpersonal, personal, and social dimensions (Neimeyer, 2006). At the interpersonal level, the traumatic event can be passed on to other people through written or verbal mediums. Tedeschi and Calhoun (2004) claimed that PTG is more likely to manifest when the other person provides support and empathy rather than disproves of the person's experience. At the personal level, the person who experienced the traumatic event aims to incorporate important episodes in his or her life to facilitate a linear sense of his or her actual self-concept. At the social level, individuals who have experienced PTG may contribute to broader changes and may help the community to cope with wider social catastrophes (Tedeschi & Calhoun, 2011). For example, the survivors of the September 11, 2001 terrorist attacks were met with an outpouring of assistance and empathy. At the social level, these individuals could contribute to changes in the society while dealing with a common problem or issue affecting many people. People who exhibit personal psychological growth from traumatic experiences may also attain wisdom through their

struggles with adversity. Wisdom, in this context, is the ability to balance action and reflection, to weigh the known and unknown aspects of life, and to be able to accept paradoxes that life confers and address the questions of human existence (Tedeschi & Calhoun, 2004). The survivors, through their wisdom, create a new life path and philosophy of life. This attitude changes their past core beliefs and assumptions, thus directing the survivors to the new probabilities and opportunities that were not present before the trauma.

In the Calhoun and Tedeschi (2004) theoretical model, the individual's growth is recognized as a result of the subject's confrontation with trauma; being influenced by numerous factors, such as environmental (level of distress from the trauma, sociocultural influences, social support); and individual characteristics including emotional self-disclosure, personality features, coping skills, and stress management.

The theory of PTG was appropriate for this study because there are several substantial cognitions from the Islamic faith that align with the process of PTG. One potentially valuable cognition from the Islamic perspective is to recognize the reality of this world and its temporality (Hamdan, 2008). According to the Islamic faith, life on earth is only a short-lived phase through which humans journey on to eternal life in the Hereafter. Pain, afflictions, distress, and fatigue are inescapable aspects of life, but serve a purpose. According to the Islamic faith, the Hereafter will be different from life on earth. Anticipating the next life and appreciating the nature of this world may make it easier to handle the challenges that a person must face in life (Hamdan, 2008). To explain the purpose of hardships in life, The Quran says, "So verily, with the hardship, there is a

relief; verily with the hardship, there is ease" (Qur'an, 94:56). In this verse, hardship is stated once, but ease and relief are mentioned twice. The ease that follows every difficulty will be greater than the adversity itself. For those of the Islamic faith, after difficulty, ease will come as Allah has promised; He will make a way out for humans (Al-Mundhiri, 2000). The more severe the depression and stress, the closer a person is to assistance and relief. When Allah tests people by means of miseries and disasters, if they are accepting and patient, the difficulties may become easier for them to tolerate. This thought process can be encouraging for those who feel that their state will not improve or that there is no solution to their difficulties, such as individuals suffering from chronic illnesses including breast cancer. This is often connected to feelings of helplessness and hopelessness (Hamdan, 2008). Hence, from an Islamic perspective, Muslim Omani women believing that after hardship, there will be relief aligns with the concept of PTG and is appropriate for understanding psychosocial growth in Muslim Omani women with a history of breast cancer.

## Previous Studies on Posttraumatic Growth

Researchers have documented the association between exposure to terrorism, political violence, and certain mental health conditions, such as PTSD (Heath, Hall, Canetti, & Hobfoll, 2013). Bleich, Gelkopf, and Solomon (2003) examined the relationship between PTSD and PTG in a cohort of 1,613 Palestinian and Israeli citizens. The basis of the study was related to the Al Aqsa Intifada, a time that was characterized by many civilians being exposed repeatedly to terror attacks and bombings (Bleich et al., 2003). Bleich et al. noted that almost half of the nationally representative sample of

Israeli nationals confirmed either direct or indirect exposure to terrorism. The exposure level was used to show the clinical significance of comprehending the nuances in the link between mental health outcomes and exposure to terrorism or violence (Bleich et al., 2003). The population in Israel is comprised of distinctive ethnic cultural groups (i.e., Jews and Palestinian Citizens of Israel [PCI]) who have their own unique religion, ideology, and ties to Palestine. Therefore, Bleich et al. also assessed whether PTSD and PTG symptom severity were the same for PCI and Jews. Bleich et al. concluded that the severity of PTSD symptoms, throughout symptom clusters for two ethnic groups, furthered the increased self-reported PTG; however, Bleich et al. did not find that PTG could reduce symptom severity. Further, the relationship between PTG and psychological trauma may have surfaced differently for various cultures, particularly for ethnic minority groups. The PCI reported higher PTG (Bleich et al., 2003). The level of PTG is not dependent on the severity of the PTSD symptoms experienced. However, PTSD symptoms such as avoidance, re-experiencing, and hyper arousal were found to be consistent in cases of higher PTG. Numbing and avoidance symptoms were not found to be associated with PTG because the experience of PTG requires cognitive processing of the trauma (Bleich et al., 2003).

Concerning the research on the relationship between PTSD and PTG, Chen, Zhou, Zeng, and Xinchun (2015) validated that PTSD symptom cluster severity was related to greater concurrent and subsequent PTG. At no point did the researchers find that self-reported PTG was related to fewer PTSD symptom cluster severity either prospectively or cross-sectionally (Alam, 2006; Bleich et al., 2003). These findings are

consistent with previous studies on the association between PTSD and PTG (Ai Al, 2008; Alam, 2006; Shakespeare-Finch, 2013).

In another study about PTG, Ibrahim et al. (2013) used a Palestinian sample to investigate the dynamics of PTG across different trauma types. Posttraumatic stress, cumulative trauma, depression, PTG, anxiety, and stress-related growth measures were administered among the participants (Ibrahim et al., 2013). Ibrahim et al. (2013) confirmed that PTG was not a predictor of any mental health symptoms and that it was different from self-reported growth, which is normally used to describe growth in nontraumatic instances. Kira et al. (2008, 2011) suggested the use of a two-way taxonomy of traumatic stressors that is both empirically and theoretically based. In their taxonomy, Kira et al. (2008) differentiated four different types of traumas: Type I, which occurs when a traumatic situation takes place once and is not repeated; Type II, which indicates a traumatic experience happened several times in the past and then stopped; Type III, which occurs when a traumatic situation takes place and continues to occur without ending; and Type IV, which occurs when there is cumulative trauma that includes the accumulative effects of different types of trauma and victimization.

Furthermore, Kira et al. (2008) and Richmond et al. (2009) added that cumulative trauma burden, polyvictimization, and intense challenges within an individual's life have been found to contribute to differences in mental health outcomes beyond that which is accounted for by the combination of all aggregate trauma types. Type I traumas are associated with survival and secondary trauma types are correlated with PTG (Kira et al., 2008; Richmond et al., 2009). However, Type II traumas associated with sexual abuse

and abandonment by a mother did not seem to relate significantly to PTG (Kira et al., 2008; Richmond et al., 2011). Type III traumas, such as collective identity traumas (e.g., poverty and discrimination), were negatively linked to PTG (Kira et al., 2008; Richmond et al., 2011). Therefore, not each type of trauma was associated with PTG and some appeared to obstruct growth. The level of PTG experienced is specific to each individual. It is dependent on an individual's ability to resolve and to confront the trauma. Internal factors such as coping styles, personality, emotional self-disclosure, and stress management levels are key in determining a person's ability to deal with trauma. Additionally, external factors such as social support, level of distress caused by the trauma, and sociocultural influences specific to the individual also contribute to a person's ability to negatively or positively deal with trauma (Calhoun & Tedeschi, 2006). These are the key factors that would influence the levels of PTG manifested by an individual's post trauma event. An event is considered traumatic if it alters a person's understanding of the world by disrupting his or her cognitive mechanisms or shattering his or her perceived notions of the world. Repairing of this process, which involves restructuring of the cognitive processes, is what feeds into PTG (Calhoun & Tedeschi, 2006).

Even though the PTG framework suggests that suffering and trauma could lead to growth, it is important to note that this is dependent on the internal and external factors experienced by an individual. For example, a negative personality trait, such as self-discrepancy, would impede or obstruct PTG (Nelson, 2011). Higgins (1997) introduced the concept of self-discrepancy to explain the relationship between aspects of

the self and either positive or negative effects. Higgins (1997) theorized that individuals possess different types of standards and self-guides; against which they compare their current selves. Individuals may compare themselves to an ideal self-guide, which represents their wishes or hopes. They may compare themselves to the self-guide they think they should be which represents their obligations or responsibilities. Individuals are either aware of their self-guides or are unaware of them. In the case of a deeper awareness of the self-guide, individuals experience positive effects. In the case of a discrepancy or unawareness of the self-guide, individuals experience negative effects. The degree of effect is also differentiated by the prominence of the type of self-guide being used. The degree of discrepancy is related to the experience of negative effect, such that the greater the discrepancy, the greater the negative affect.

PTG has also been discussed in studies related to Acquired Immunodeficiency Syndrome (AIDS) and Human Immunodeficiency Virus ([HIV] Milan, Richardson, Mark, & Kemper, 2004; Nasr, 1989). AIDS and HIV are two conditions which present complicated psychological problems, mostly due to the associated stigmas. Wong (2008) discovered that 59% to 83% of the participants reported experiencing PTG as a result of HIV/AIDS. In another study, concerning whether PTG presented among Jewish people who were children during the holocaust, Lev-Wiesel and Amir (2005) noted that most of the participants reported a small amount of growth and PTG was positively correlated with PTSD arousal symptoms. Some of the participants appeared to channel the cumulative arousal symptoms into adaptive behaviors (Lev-Wiesel & Amir, 2005).

Cobb, Tedeschi, Calhoun, and Cann (2006) conducted a study of survivors of intimate partner violence to examine dose-response theory of PTG. According to the dose-response theory, as the trauma intensifies, including its severity and duration, there will be an increase in the amount of PTG (Cobb et al 2006). Cobb et al. noted that the participants reported moderate levels of PTG and that PTG levels were higher than those reported in other populations, including breast cancer survivors. In relation to the dose-response issue, researchers Cobb et al. (2006) and Wright et al. (2007) reported that out of the six domains of PTG examined (personal strength, new possibilities, relating to others, appreciation of life, spiritual change, and total PTG), only appreciation of life had a substantial correlation with severity of abuse; therefore, women who reported severe levels of abuse also experienced high PTG.

In a study on Polish women, Andysz et al. (2015) determined what percentage of women experience PTG after breast cancer surgery. Forty-seven women who had undergone breast cancer surgery agreed to take a survey to determine their levels of PTG using the Polish version of the Posttraumatic Growth Inventory ([PTGI] Bert, 2011). Andysz et al. revealed that 43% of the women experienced high levels of PTG characterized by a greater appreciation of life, altered priorities, and belief in newly acquired strength. Andysz et al. claimed that 23% reported moderate levels of PTG, and 34% reported low levels of PTG.

The consequences of suffering from a severe or deadly condition like breast cancer may include improved relationships with other people and positive changes regarding self-perception. Andysz et al. (2015) also revealed that several of the women

of those assessed confirmed to have experience with PTG. With regard to PTGI dimensions, Andysz et al. noted that due to breast cancer, 43% to 53% of the respondents appreciated life more, changed their priorities to include a greater sense of reason, and became convinced of their own strength. Women who were aged less than 50 years appreciated life more, compared to older women (Andysz et al., 2015). Women aged 50 and below experienced higher levels of PTG than women aged 50 and above. Different perceptions based on age was evident in the appreciation of life that was exhibited by women cancer survivors aged 50 and below.

Bellizzi and Blank (2006) also deduced that older populations of breast cancer survivors have dealt with more life altering scenarios that may have left them desensitized. For instance, by the age of 60, many may have experience the loss of a loved one, a chronic illness, and poor health (Bellizzi & Blank, 2006). Past challenges may have allowed them to adjust more easily to a cancer diagnosis as opposed to the younger population. Additionally, a cancer diagnosis is unexpected at a young age, and biologically more aggressive; consequently, a second chance at survival is met with significantly more appreciation (Mystakidou et al., 2008). In a study involving elderly women with breast cancer and PTG, Kimhi et al. (2010) compared the women with breast cancer to breast cancer-free women and concluded that the gravity of the disease plays a greater role in the PTG experienced, rather age of the patient. Further, Kimhi et al. (2010) reported that women with severe disease, or experiencing the most comprehensive treatment, may have the highest degree of PTG, which is in accordance

with the theory of PTG in which an immense and seismic trauma create more PTG (Milan et al., 2004).

Respondents who reported participating in various physical activities also affirmed that they had higher levels of PTG and had better relationships and self-perception in comparison to those who were not physically active (Andysz et al., 2015). People who experience serious chronic health issues may give the impression that their lives are dominated and controlled by the illness (Yang, Baumgartner, & Baumgartner, 2012). However, physical activity may give them hope to take control of their lives (Yang et al., 2012). Kleim and Ehlers (2009) found that there was no direct association between physical activities done by the women and occurrence of PTG. This was indicative of positive illusion, where PTG served as a palliative function and did not lead to action growth. Action growth, as noted by Hobfoll et al. (2007), means growth that has behavioral and cognitive manifestations.

Kleim and Ehlers (2009) addressed the relationship between psychological distress and PTG among assault survivors in the United Kingdom. The investigation consisted of two different studies: the first involved 180 individuals who had been medically cared for after having sustained assault injuries 2 weeks prior to the study, and the second involved the assessment of 70 assault survivors who had been treated in the same emergency room 3 to 15 months before the data collection process began. Kleim and Ehlers noted that the assault survivors with low or high levels of PTG experienced minimal distress compared to those who reported moderate levels of PTG. Kleim and Ehlers extrapolated that this was due to some individuals not viewing an event to be

traumatic and thus not experiencing greater distress in relation to the situation. Alternatively, the participants who viewed the situation as life changing were more likely to experience distress and higher levels of PTG (Kleim & Ehlers, 2009). PTG is an adaptation for most individuals and it can lead to better life adjustment (Kleim & Ehlers, 2009). Some assault survivors confirmed moderate levels of PTG that were linked to distress 6 months after the event occurred.

Cordova, Cunningham, Carlson, and Andry-Kowski (2001) conducted a qualitative study in Turkey to evaluate positive changes after a diagnosis of breast cancer. Cordova et al. revealed four main themes: changes in self-perception, empowerment, interpersonal relations, and appreciation of life. People who experience severe trauma show higher levels of PTG compared to individuals suffering minor trauma (Cordova et al., 2001; Tedeschi & Calhoun, 1996). Tedeschi and Calhoun (1996) deduced that people who suffer severe traumatic life events experience more PTG because the trauma initiates deeper consideration of life events.

## Assessment of Posttraumatic Growth

There are three psychometrically validated quantitative measures that are used to evaluate PTG (Park & Lechner, 2006). These measures include the PTGI, the Benefit Finding Scale (BFS), and the SRGS. The most commonly used and researched measure is the PTGI, which was developed by Tedeschi and Calhoun (1996). The PTGI is a self-report inventory that is used to assess the person's perception of positive changes in the aftermath of a traumatic experience. The PTGI's five subscales include personal strength, new possibilities, relating to others, spiritual change, and appreciation of life. A common

criticism of the PTGI is that it only allows people to reveal positive growth experiences; it cannot be used to measure possible negative life changes that occur after trauma. The five domains of PTG will be described in detail in this dissertation.

## Posttraumatic Stress Disorder and Trauma

Breast cancer is potentially a traumatic stressor and due to this, much of the previous research has been geared toward investigating the occurrence of PTSD in patients diagnosed with breast cancer and survivors of breast cancer. In the current *Diagnostic and Statistical Manual of Mental Health* ([DSM-V] American Psychiatric Association, 2013), the diagnostic criteria of PTSD include five main symptoms used to identify PTSD in individuals who have been exposed to traumatic events: avoidance, intrusion, negative alterations in arousal, cognition, and mood and reactivity. The duration of these symptoms is also a factor in identifying PTSD. Additionally, the extent to which it affects functionality serves as an indicator of the severity of the PTSD. However, it is important to consider that these symptoms could also be the result of substance abuse or a concurrent medical condition. Nevertheless, the estimates of numbers of individuals suffering from PTSD vary, with some researchers reporting as much as 39% (Green et al., 1998), while others have observed 35% (Mundy et al., 2000). This variation can be attributed to some of the limitations that exist in the diagnostic criteria. For example, the duration of exposure to the trauma significantly alters the symptoms exhibited by the individual (Herman, 1992). Complex PTSD (C-PTSD) has been suggested as a new diagnosis to help recognize and differentiate the effects of prolonged exposure to trauma (Ray, 2008). C-PTSD has been recommended because it

includes variations in diagnostic criteria focusing on consciousness, regulation, relations with others, perception of the perpetrator, and systems of meaning (Herman, 1992).

Trauma, in addition to the *DSM-V* diagnosis, can be explained as an experience that significantly shakes or shatters a survivor's core beliefs and assumptions about the world (Janoff-Bullman, 1992). For example, assumptions such as people are deserving of good things, that life is fair, and that the world is benevolent may not hold true for individuals after a traumatic experience (Janoff-Bullman, 1992). In some incidents of trauma, such as breast cancer, survivors may look for meaning in their traumatic experience. Many patients learn to develop schemas to adapt to the traumatic event or they create new perceptions of themselves, the world, and others (Janoff-Bullman, 1992). It is through cognitive processes related to the shattering of an assumption, and the development of a new schema, that is foundational to the concept of PTG (Calhoun & Tedeschi, 1999, 2004, 2006; Tedeschi & Calhoun, 1995, 1996, 2004). In previous studies, growth following traumatic incidents has been given many different labels. The terms *meaning making*, *benefit finding*, *stress-related growth*, *adversarial growth,* and PTG have different implications, but their general meaning does not change. All of these descriptions imply that some kind of value has been added to the lives of the victims as a result of their traumatic experience.

Literature dating back to Ancient Greece is full of tragic themes, mostly depicting a hero battling a great and terrible event (Tedeschi & Calhoun, 1995). Surviving the great suffering that comes with the event is the origin of the ancient belief in the idea of growth through suffering. Additionally, religions such as Judaism, Christianity, and Buddhism

emphasize that lessons can be learned from suffering. Islam, like other religions, also emphasizes the lessons learned from suffering tracing back to as early as the Shi'a Moslems. Practices of rituals such as self-injury as a form of physical suffering were performed to mark the martyrdom of Prophet Mohammed's grandson Hasan and were said to bring about enlightenment (Alam, 2006).

In psychology, the shift in research toward positive responses to trauma is relatively new. It was not until the 1990s that behavioral scientists began to focus on PTG (Calhoun & Tedeschi, 2011). In 1995, Tedeschi and Calhoun published the first book on PTG. From that point on, researchers have continued to explore this concept, and seven instruments have been published to date that measure adversarial growth (Linley & Joseph, 2004). After encountering adversity, positive changes commonly occur, as attested by philosophy, literature, and religion (Tedeschi & Calhoun, 1995; Tedeschi, Park, & Calhoun, 1998). These positive experiences following trauma have been proven to exist in patients after a battle with chronic illness, heart attacks, bone marrow transplants, rape and sexual assault, and with the caregivers of children with disabilities (Ahrens et al., 2010). The intensive emotional experience unlocks higher levels of cognitive functioning in survivors than before the trauma (Linley & Joseph, 2004).

In the study of PTG, it is important to determine how much growth can occur through PTG or the actual levels of growth that make an individual considered for having PTG. There are a number of measurements and theoretical related norms that need to be resolved to resolve this dilemma. Calhoun and Tedeshi (2006) claimed that the answer does not depend on establishing cutoff scores. Rather, Calhoun and Tedeshi

argued that there is a variability in PTG scores across individuals and populations that contraindicate setting cutoff levels as the variance may be linked to the high personal and relativistic nature of growth.

## Personal Growth

According to Lindstrom (2013), "I am more vulnerable than I thought but much stronger than I ever imagined" (p.5) is a summation of the belief shared by many relating to the kind of personal growth an individual undergoes after experiencing trauma. The feeling of empowerment is also a common sentiment shared by women who have survived breast cancer (Sadler-Gerhardt, 2010). The feeling stems from the understanding that having gone through such an experience, a person has been tested and found to be strong and resilient (Calhoun & Tedeschi, 2008). As noted by Barthakur, Sharma, Chaturvedi, and Manjunath, (2010), one breast cancer patient stated,

> I think I have become more stable, more mature, and more confident with this experience. I am more accepting and actually to an extent, I have become more shameless. Initially I wouldn't talk about the female organ as easily as I can do now. Today I can stand up before hundred people and say I have breast cancer, otherwise earlier saying the word breast itself was a huge challenge. (p. 5).

Some survivors' personal growth extends beyond the cancer (Sadler-Gerhardt, 2010). Breast cancer survivors experiencing PTG may view the world as less predictable postdiagnosis; however, they are also inclined to trust that if they survived breast cancer, they can survive anything (Sadler-Gerhardt, 2010).

## New Possibilities

Survivors of traumatic experiences such as breast cancer have reported experiencing the development of new interests, new activities, the emergence of new possibilities, and embarking on significant new paths in life (Tedeschi & Calhoun, 2004). Just as traumatic events are often unexpected, sometimes they lead to unexpected positive changes, such as changing interests or life paths, meeting new people, and engaging in new activities (Calhoun & Tedeschi, 2006). For example, survivors may decide to change their careers, develop new friendships, or have access to better resources due to their traumatic experiences. Opportunities may develop for survivors that otherwise would not have been available (Calhoun & Tedeschi, 2006).

## Relating to Others

Traumatic events can lead to the destruction of relationships and the loss of self. However, surviving and dealing with a traumatic experience can also have benefits for how survivors relate to others. For instance, a person's view of life, and the people in the individuals life, can positively change, leading to better interpersonal relations, gratitude, and an appreciation of loved ones (Nelson, 2009). Survivors of traumatic experiences may also display an increased sense of empathy for those who suffer, stemming from their first-hand understanding of pain and suffering (Calhoun & Tedeschi, 2004). Individuals have reported that because of their own experience with tragedy and loss, they feel more connected to others and feel more compassion for those who suffer (Calhoun & Tedeschi, 2006). Survivors of traumatic events have also reported a greater sense of intimacy, self-expression, and closeness to others, as well as an increased

willingness to disclose information about themselves or their experiences that may have been uncomfortable in the past (Calhoun & Tedeschi, 2006). However, the increased sense of intimacy with self and others is sometimes perceived as a double-edged sword—a person finds out who true friends are and those who merely claim to be good friends. However, family members report a greater sense of intimate attachment in experiencing the illness, terminal or otherwise, of a close family member (Calhoun & Tedeschi, 2006).

## Philosophy of Life

A new and changed philosophy of life is another consequence of PTG. Previous goals, such as amassing material wealth and social recognition, may now be replaced by less materialistic goals, such as ensuring long lasting relationships between family and loved ones, a greater appreciation of life, and finding joy in life itself (Bower et al., 2005). Aspects of life that previously may have been deemed insignificant may become a sole reason for living (Tedeschi & Calhoun, 2004). For example, a toddler's first step, a baby's laughter, or a display of affection from a loved one may be deemed especially important to a survivor of a traumatic experience (Tedeschi & Calhoun, 2004). To echo this sentiment, Jordan (2000) shared his diagnosis with multiple cancers in this manner, "Even the smallest joys in life took on a special meaning" (p. 216).

## Spirituality

An individual's belief system is a significant component of an individual's life and actions. Spiritual beliefs have been recognized as contributors to personal growth (Schulz & Mohamed, 2004). Bower et al. (2005) suggested there is a positive connection between spirituality, cognitive processes, and the subsequent development of PTG. After

adversities, coping is often made easier and more meaningful when supported by spirituality (Calhoun et al., 2000; Prati & Pietrantoni, 2009). Pargament, Smith, Koenig, and Perez (1998) also found that spirituality and religiosity played a role in confronting a painful event such as facing a physical illness. Additionally, Bert (2011) suggested that religious and spiritual beliefs can become the root of a person's philosophy of life and help provide the strength needed to cope and deal with challenging situations, as well as provide them with guidance and support to come to terms with traumatic and painful events. Hence, religion and spirituality can assist in individuals' growth following a traumatic event (Richmond et al., 2011). Roesch, Rowley, and Vaughn (2004) established that spirituality and religiosity can also give people guidance on how to assess and behave in a situation, understand what actions should be taken, and how to decide which coping strategies to use.

**Spirituality and Posttraumatic Growth as They Relate to the Muslim World**

Most of the research available on PTG has been carried out in the Western world, specifically in the United States. This has led to the supposition that the experience of PTG may be a western concept, shaped by western sociocultural situations (McMillian, 1999). However, Ho, Chan, and Ho (2004) found that Muslim cancer patients reported positive experiences, cognitive processing, and coping mechanisms similar to PTG development after illness. In a study of Islamic patients undergoing breast cancer treatment in Malaysia, Ho et al.'s participants reported positive effects from their religious practices, which served as a coping mechanism for the patients. The results from Ho et al.'s study confirmed the existence of PTG among the Islamic patients who

suffered breast cancer in Malaysia.

In studies in Islamic countries, medical examiners indicated that the Islamic cultural setting, with its emphasis on relationships and coping in the form of seeking support, should play a role in patients' psychological functioning (Bouchra et al., 2016; Kagawa-Singer, 2011; Michael & Esmat, 2011). Social and family support can provide opportunities for self-disclosure, stimulate cognitive processing and adaptive coping, offer new perspectives, and assist people in finding meaning in their cancer diagnosis. In studies carried out among breast cancer patients in Saudi Arabia, participants reported that their faith continued to help them deal with the pain and suffering during the entire traumatic period from the diagnosis to the treatment of breast cancer (Al-Azri et al., 2015; Al-Mahrooqi, 2010). The patients' faith in Allah's (God's) power to heal them filled them with hope, and they accepted that it is Allah's will; this belief improved their way of dealing with the difficult situation. The role of religion in reducing the distress of the pain and the treatment of breast cancer was further validated by studies conducted by Al-Madouj et al. (2011), Al-Sharbati (2012), Bouchra et al. (2016), Elsheshtawy, Abo-Elez, Ashour, & El Zaafarany (2014), and Perihan (2010) on Muslim women in Iran, Egypt, and Turkey with breast cancer.

Some researchers have conducted in-depth, semistructured interviews with breast cancer survivors to determine the coping skills used by these patients during their battles with cancer (Dolbier et al., 2010; Perihan, 2010; Stephan, 2012). The researchers found that spirituality was a major source of psychological support for the participants (Esmat et al., 2015; Gwynn, 2008). Almost all participants ascribed their cancer to the will of

God. However, they were also actively involved in their medical treatments. The attitude of faith in Muslim Iranians was a contrast to cancer victims in Western cultures who believed that an external health locus of control curtails active participation in cancer detection, screening, and treatment (Harandy et al., 2010). In some studies (see Harandy et al., 2010; Hawthorne et al., 2011) a higher percentage of breast cancer patients were using religion as a coping mechanism to face their trauma than those who were not. The subjects determined that God had chosen this path for them, and now they had no choice but to walk that path. Women discussed how their faith in God helped assuage their fears about future uncertainties and fears (Manne et al., 2004). Hence, Muslim breast cancer patients used their religion to cope in similar ways as how other individuals use religion as understood in the theory of PTG (Kira et al., 2008).

For the survivors of Mount Merapi in Indonesia, they used the term *batiniah*, related to the inner life, as a way in which to describe the changes in their spiritual lives following the traumatic event, much like breast cancer survivors (Mahfouz et al., 2013). Although the lives of these Indonesians had not returned to normal, they felt that their batiniah was peaceful because of the simple belief that everything comes from God. Similarly, torture survivors from the Muslim religion were moderately involved in the practice of strengthening their faith; they also exhibited higher level of PTG (Kira et al., 2006). The same can be noted for Jewish adolescents, who had been exposed to terror attacks, who confirmed they became more involved in religious affairs; attributing to their higher levels of PTG (Laufer & Soloman, 2006). To confirm the positive effects of many prophets and saints who have endured crises and suffering, they eventually

attained higher levels of mystical and spiritual control. For example, Saul of Tarsus became an apostle and later changed his name to Paul due to immense suffering (Thouless, 1958). In the Islamic religion, the Prophet Muhammad's ascension (*Mi'raj*) relates to this concept of suffering and spiritual attainment as he ultimately ascended to the divine throne (Nasr, 1989).

From another perspective, it is a challenge to synthesize the experience of trauma with an omnipotent deity and beliefs in a benevolent realm, and it is possible that any effort to make meaning of these thoughts can be linked to increases in PTG (Pargament et al., 2006; Park, 2005). A willingness to struggle with existential questions and an openness to religious experiences can correlate positively with the occurrence of PTG. More so, an individual may believe that PTG is elevated by feeling anger toward a person's deity, and this may then be followed by personal resolution (Siegel & Schrimshaw, 2000).

Alternatively, Calhoun et al. (2000) and Prati and Pietrantoni (2009) noted that spirituality is a complex concept that may not only support PTG, but may also encourage its decline. Although many trauma survivors affirm that they have experienced increases in spiritual and religious functioning after a traumatic experience, some report that they lost faith in their God and in their religion (Falsetti, Resick, & Davis, 2003). Religious struggles may be with the self (ambivalence about religious beliefs and faith) and with others, as an individual can actively disagree with religious cohorts or authorities about a deity or religious concepts. There are people who prefer to use prayer in their initial efforts to cope with, and make sense of, traumatic or disturbing experiences while trying

to resolve their spiritual struggles (Ai, Tice, Peterson, & Huang, 2005; Schuster et al., 2001). Although prayer may play a role in the link between religion and positive mental health states or outcomes, other researchers contradict its positive effects (Ai et al., 2005; Ellison, Boardman, Williams, & Jackson, 2001; Harris et al., 2008). Prayer for some people can lead to poor physical health, lower levels of life satisfaction, negative emotions, and reduced well-being (Ai et al., 2005; Ellison et al., 2001; Pargament et al., 1997). Calhoun et al. (2000) and Prati and Pietrantoni (2009) also noted that spirituality is a complex concept that may not only support PTG, but may also encourage its decline. According to researchers, aspects such as negative emotions, increased avoidance, reduced general well-being, poor physical health, and declined life satisfaction levels can be attributed to practices such as prayer (Ellison et al., 2001). The reciprocal relationship between prayer and stress serves as a contributor to greater distress. For instance, people who are more distressed tend to pray more frequently and develop an association between prayer and distress (Ellison et al., 2001). McCullough (1995) suggested to avoid inconsistencies in studies relating to prayer, and to understand the nature of prayer and the potential effect it has on people who practice it, requires attention to the design, quality, and quantity of studies concerning prayer (McCullough, 1995**).**

## Models of Posttraumatic Growth: Distress

Tedeschi and Calhoun (1995, 1996, 2004) have identified various components of PTG. However, it is important to note that they also acknowledged that other negative trauma responses may occur alongside PTG. Manageable levels of distress are a common occurrence after a traumatic event; however, if the distress levels are too high, it is

difficult for PTG to occur. There is a direct correlation between the severity of the trauma and the level of PTG experienced (Baldacchino & Buhagiar, 2003). Hawthorne et al. (2011) claimed that the levels of PTG experienced by a trauma survivor are dependent on the depth of the trauma. Khalil Gibran (1923) summed it up in asserting, "The deeper that sorrow carves into your being, the more joy you can contain" (p. 4), indicating that reactions to trauma and the following results are variable. Investigation of the correlation between the severity of a trauma and the levels of PTG did not reveal a linear relationship, which means that increased trauma will not necessarily increase PTG levels. The level of growth is dependent on the perception of severity, rather than the actual physical severity (Hawthorne et al., 2011).

Researchers have produced mixed results concerning the relationship between psychological stress and PTG as well (Chopko, 2010; Moore et al., 2010; Sawyer & Ayers, 2009). Some researchers (see Chopko, 2010; Moore et al., 2010) have confirmed that there is a positive and significant relationship between these two variables, while other researchers (see Kimhi et al., 2010; & Sawyer, 2009) have found that the relationship is linear, negative, or nonsignificant. According to Chopko (2010) and Loiselle et al. (2011), there is a linear and positive relationship between PTG and traumatic stress, mostly after a traumatic life event has occurred. Chopko (2010) conducted a study on Midwestern police officers (N = 183; 170 males and 13 females, M = 37.9 years) who had gone through a self-perceived, work-related traumatic events. It was noted that the overall amount of traumatic stress was positively linked to all subscale scores of PTG and was confirmed by the Post Traumatic Growth Inventory (PTGI).

However, researchers have not consistently found a relationship between adversarial growth and psychological stress. Adversarial growth is similar to PTG and defined as positive life changes demonstrated after encountering adversity (Tedeschi & Calhoun, 1995). Sawyer and Ayers (2009) confirmed this finding when they performed a cross-sectional study based on the Internet with women (N = 219, M = 28.14 years) who had given birth during the previous 3 years and found that there was a negative and non-significant relation between PTSD and PTG symptoms. Kimhi et al. (2010) also conducted a study where samples included Israeli secondary school students and adult Israelis and found there was a negative relationship between total scores on the measure of adversarial growth on the Brief Symptom Inventory an instrument to assess depression, anxiety and somatization (Derogatis & Savitz, 2000). In both samples a negative relationship existed ($r = -.28$, $r = -.43$). Therefore, researchers have had mixed results in determining the relationship between PTG and traumatic stress.

Further, manageable distress levels and depression arising from a traumatic event can serve to push a person into a state of acceptance (Dolbier, Jaggars, & Steinhardt, 2010; Tedeschi et al., 1998). However, this is different for individuals who are resilient in that they do not experience being pushed into resilience. Resilient individuals are able to manage the undesirable effects of trauma, whereas PTG pushes the individual into growth and change from his or her traumatic circumstances (Levine, Laufer, Stein, Hamama-Raz, & Solomon, 2009). Tedeschi and Kilmer (2005) further defined resilience as an effective adaptation and coping mechanism in the face of life trauma and that in contrast, PTG goes beyond resilience and is related to people who have not only adjusted

to the stressor, but who have also been changed by their struggles with adversity.

Although PTG and distress appear together in some situations, there has been some debate as to whether one can lead to the other or whether they appear as independent constructs. When investigating and analyzing psychological growth as an eventuality of traumatic experience, it is important to expect moderate to high levels of distress among individuals. Kleim and Ehlers (2009) affirmed that higher PTG levels can be associated with greater depression and PTSD symptom severity among victims of sexual assault or any other disturbing experience. The more life changing or life threatening an event or situation is for an individual, the more growth occurs (Cole, 2010). This understanding presents a paradox whereby the more traumatic an event, the more room or motivation there is for growth to occur (Frazier et al., 2001; Thompson, 2000).

Contradictory to these findings, Grubaugh and Resick (2007) concluded that PTG is not related to psychological distress and that the relationship between growth and depression or distress might be negative (Frazier et al., 2001; Frazier, Conlon, Steger, Tashiro, & Glaser, 2006). Frazier et al. (2001) and Thompson (2000) found that if growth is maintained for a longer time, the level of distress diminishes. However, sometimes growth is either not sustained or does not occur at all for those who at outset report very high levels of distress. Frazier et al. (2001) and Gwynn (2008) suggested that because individuals experience trauma in different ways, rather than showing a cause and effect link between depression or PTSD symptoms and PTG, the correlation might be moderated by other factors like attachment styles or personality traits.

## Models of Posttraumatic Growth: Rumination

Cognitive work on restructuring thought patterns and beliefs related to a traumatic event is termed rumination (Cann et al., 2010). A traumatic experience will often lead to a disruption of a person's belief system. Individuals who believe in the benevolence of the world struggle to understand why the traumatic experience occurred. For example, patients undergoing breast cancer treatment have to deal with understanding why they were diagnosed with breast cancer, had to undergo numerous tests and wait for results, deal with problems such running out of finances, unstable support systems, and many more challenges. These individuals begin to experience an urge to understand and learn, such as partaking in personal research, finding support groups, and identifying trial treatments. The survivors might involve themselves in cognitive work to try to gain an appreciation for the event, or events, and to work on restructuring their beliefs (Cann et al., 2010).

In rumination, PTG does manifest automatically; it happens over a period of time while the individual strives to understand the meaning of the traumatic event. Cann et al. (2010) shared that rumination can be used in a negative way, thus depicting maladaptive thought patterns associated with situations or events. Alternately, Tedeschi and Calhoun (2004) explored rumination in a neutral manner to try to make sense and meaning of an event. What they discovered was that rumination that occurs in the early stages of PTG involves mainly intrusive and automatic thoughts about events that are consistent with re-experiencing diagnostic criteria of both posttraumatic stress and acute stress disorders. An early stage of rumination is unique compared to the later stages, which involve many

complex processes (Tedeschi & Calhoun, 2011).

The early rumination stage is linked to two parallel aspects of the PTG model: a cluster that includes the management of automatic rumination, disengagement from goals and emotional distress, and self-disclosure. The parallel cluster has three sections. The first leads to emotional distress, consistent with events that occur during early rumination. The second part, increased management of automatic rumination, allows individuals to process their thoughts about the disturbing or traumatic event with a level of self-control. The last part, disengagement from goals, involves the attempt by individuals to reconcile and make meaning of their pretrauma life goals in relation to their potentially changing goals after the traumatic experience. The self-disclosure component is associated with the type and amount of information some individuals share about the traumatic event with others (Tedeschi & Calhoun, 2004). By sharing the event through writing or talking, the development of PTG is accelerated, in part, because the responses and attitudes of the person's primary reference group are significant in the development of their post trauma understandings of their lives and the world (Cann et al., 2010).

**Model of Posttraumatic Growth: Character of the Survivor**

A survivor's character is also essential in determining the existence of PTG in his or her recovery process. When assessing PTG and related traumatic stressors, females normally report higher levels of PTG than males. In a meta-analysis of 70 studies on PTG, Cann et al. (2010) found that women reported considerably more PTG than men (g=.27, 95% c1=.21 .32). An individual's personality also has an influence on the way he

or she handles both positive and negative events in his or her life (Calhoun & Tedeschi, 2009). Women experience different stressors during a traumatic event, and this is further influenced by factors such as age, social background, educational level, and economic background. For instance, receiving a breast cancer diagnosis is less stressful at an older age than at a younger age (Morris & Shakespeare-Finch, 2011). However, breast cancer in a younger woman is reported to be more aggressive and consequently more traumatic, not to mention the effects of a less expected diagnosis can be traumatic in any population (Bouchra et al., 2016; Cordova & Andrykowski, 2007). Moreover, to experience higher levels of PTG, there is need for more aggressive cognitive constructs that tend to be more present in younger breast cancer patients than in the older population. Younger individuals may be more able to acquire new mindsets and adopt new coping mechanisms more easily than older individuals who may be more accustomed to a certain mindset (Mystakidou et al., 2008). Based on the model of PTG, identifying the event as more threatening is expected to lead to the cognitive process that are vital to the creation of PTG.

Younger women with breast cancer commonly experience stressors related to sexuality and reproduction post treatment (Avis, Crawford, & Manuel, 2005; Roesch, et al, 2004). Researchers (Avis et al., 2005) found that cancers and tumors in young women are much more aggressive compared to cancers found in older patients. More aggressive cancers require more aggressive forms of treatment, come with worse side effects, and correlate with lower chances of survival. These effects feed into fears of death, leaving behind a young family, or the inability to have a family post treatment.

Developing nations including Oman currently bear a more severe load of the illness, where women are normally diagnosed at the later stages and are younger at he onset compared to women in the Western world (Al-Azri et al., 2014; Kumar et al., 2011; WHO, 2014). The average age of a woman in Oman with breast cancer is 48.5 (S. D. +/- 10. 8) and 48% of the female patients are premenopausal. In contrast, the median age of diagnosis for breast cancer for women in the United States is 62. However, the median age of diagnosis may vary by race and ethnicity (Howlader, Noone, & Krapcho, 2013).

It has been found that young survivors experience high stress levels related to work and children (Avis et al., 2005). These women might be concerned regarding the future of their children after their death causing an increase in stress. Furthermore, QOL of young breast cancer survivors may be poorer than older survivors, due to the negative effects of treatment, such as physical appearance and premature menopause (Avis et al., 2005). As the number of cancer diagnoses in younger women in Oman remains high, the rate of PTG in young women in Oman suffering from breast cancer could also be higher. Nevertheless, prosocial behavior, altruism, and empathy increases with age (Frazier et al., 2001). Coping methods such as an increase in altruistic behaviors may be present for older Omani women going through breast cancer. The results of altruistic behaviors could include activities such as mentoring other cancer survivors and spending quality time with an individual's grandchildren (Linley & Joseph, 2004). Therefore, PTG is not a concept only restricted to the younger female population.

**Model of Posttraumatic Growth: Distal and Proximate Cultural Elements**

Other key elements of the PTG model include the distal and proximal cultural elements of PTG (Calhoun & Tedeschi, 2006). Individuals' immediate social circles include people with whom they interact on a regular basis, such as neighbors, close friends, family members, and coworkers. These individuals are proximate factors, while larger and less immediate aspects, such as cultural, geographical, and social influences, are distal influences (Maercker & Zoellner, 2004). A person's culture can influence either positively or negatively based on how he or she experiences and addresses trauma. For example, many U.S. soldiers experienced negative reactions when returning home from the Vietnam war; the responses they received were governed by national sentiment at the time and ranged from invalidation to outright aggression (Lerner & Gignac, 1992). In contrast, the cultural responses to Iraq war soldiers were more positive and supportive, which may be due to lessons learned from the Vietnam experience (Lerner & Gignac, 1992).

Further, Calhoun and Tedeschi (2004) referred to distal cultural elements as the "broad cultural themes in larger societies or geographical areas" (p. 12). The development of PTG following a traumatic event might be influenced distally through a narrative framework related to religious themes or themes of optimism and self-reliance (Calhoun & Tedeschi, 2006). Proximate cultural elements, the social networks within which individuals interact, might offer a more direct influence on the development of PTG than distal elements (Calhoun & Tedeschi, 2006). The primary reference group, individuals with whom the survivors interact regularly, is a proximate cultural element.

Some survivors who self-disclose their traumatic experiences and receive a supportive response, and perhaps engage in discussion about the growth, are more likely to experience PTG than survivors who receive negative responses to their disclosure or who do not discuss their experience with others (Calhoun & Tedeschi, 2006). Discussing traumatic experiences with others may not only help survivors manage distressing emotions, but also encourage them to talk to others who may offer a new perspective, which will aid in new schema development and facilitate PTG (Taku et al., 2009). Discussing traumatic experiences with close friends or family may lead to a heightened sense of intimacy and closeness (Tedeschi & Calhoun, 2004).

According to Kagawa-Singer (2011) it is not possible to understand an individual's cancer experience independently from their culture; the psychological and psychosocial burden of cancer should be analyzed within the sociocultural setting of the patient. Family is the foundation of the Islamic society, a society that is improved by the existence of extended families. In Islamic society, the family plays a role in health care, and may even act as care providers for hospitalized family members, and are therefore considered a part of the healing process (Kagawa-Singer, 2011). Many Arab patients prefer to be informed only of "good news" regarding their illness and may prefer that test results be given to their family rather than directly to them. Whereas, in the United States, patient autonomy is an ethical principle. This concept of autonomy is extended to the practice of telling patients the truth about both their diagnosis and prognosis. In contrast, in the Arab world, including Oman, not all patients and their families relate to, or accept the idea, of an individual's autonomous decision; rather, they may believe that the family

makes the medical decisions when one of its members is sick (Silbermann & Hassan, 2011).

These cultural differences also affect the view of truth-telling and disclosure, particularly as they relate to cancer. In many Middle Eastern societies, it is the responsibility of the children to protect their parents from bad news. One of the reasons for this attitude toward disclosure relates to the nature of the disease (ie., cancer), which is viewed by many societies in the Middle East as a death sentence. Revealing the diagnosis to the patient can be considered cruel and inhumane; the patients' relatives may believe that the diagnosis disclosure would lead to a loss of hope and would increase the chance of the patient dying (Silbermann & Hassan, 2011). The role of family is important in many Arab cultures, including Oman, and the main support that cancer patients receive is from their family (Silbermann & Hassan, 2011). According to Janoff-Bulman (1992), a person's culture and immediate support system is a key component during their PTG. The premise surrounding PTG involves a person sharing his or her experience, seeking tangible support, and engaging in discussion regarding his or her state. All these are significant for PTG to occur (Tedeschi & Calhoun, 2004).

## Critiques of Posttraumatic Growth

The diverse experiences documented in the study of PTG are an indication that it is not a *one-size-fits-all* approach. This creates unpredictability and complexity in the understanding of PTG. Consequently, there are researchers who seek to discount PTG as an effect of surviving trauma (Aljubran, 2010; Levine et al., 2009; Zoellner & Maercker, 2006). Types of trauma, personality traits, coping skills, and cognitive processes are all

considered when analyzing PTG in survivors; however, the results continue to remain individualized and cannot be predicted or forced (Aljubran, 2010; Levine et al., 2009; Zoellner & Maercker, 2006). Many researchers have begun to question the constructiveness of PTG and denoted that it may possess an illusory element (Levine et al., 2009; McFarland & Alavaro, 2000; Zoellner & Maercker, 2006). McFarland and Alavaro (2000) supported the notion that PTG is an illusion that serves as a coping mechanism for individuals suffering a trauma. McFarland and Alavaro explained that a person's cognitive adaptation is geared toward ensuring survival after the event. This, however, is not a criticism of PTG, rather it highlights its process. The restoration of self-esteem, reclamation over the event, and gaining an optimistic outlook of a person's current reality beyond the event are some of the ways an individual's cognitive processes are used to cope with the effects of the trauma (Westphal & Bonanno, 2007). McFarland and Alvaro suggested that "People cope with threatening experiences by constructing self-enhancing illusions of change" (p. 340). However, such reactions, deemed to be illusions, have successfully served in enabling progression in times of extreme adversity.

McFarland and Alvaro (2000) claimed that PTG is the manifestation of an individual's illusions to serve as a coping mechanism. Zoellner and Maercker (2006) critiqued the validity of PTG and claimed that for PTG to stand as worthy of research, its areas of influence must be expansive and include people's well-being, cut across various levels of distress, and significantly affect multiple areas of mental health. According to Tedeschi, Calhoun, and Cann (2007), PTG is misconstrued among researchers, and the cognitive processes affected by PTG influence a person's internal processes, which may

or may not result in outwardly visible reactions.

The controversy surrounding PTG also relates to semantics. Critics argue that PTG is not distinct from other salutogenic concepts, such as resilience (Westphal & Bonanno, 2007). Tedeschi and Kilmer (2005) claimed that resilience is an effective coping skill and method for adaptation at the time of major life stress; however, PTG goes beyond resilience and is related to people who not only adjust to stress, but are also transformed by their struggles. However, critics insinuate that these constructs have the same ground; resilience is defined as the ability to possess qualities such as problem-solving ability, high levels of self-esteem, self-regulation, and perseverance, all of which are qualities claimed to be acquired through PTG (Schuster et al., 2001). Furthermore, Lepore and Revenson (2006) commented that some theorists believe that people who are resilient may not experience PTG because they are not as stressed by the trauma as others who are less resilient. The issue of resilience is still a point of controversy in the field, since PTG was established as a concept and is currently the predominant theory for focusing on the positive impact of adversity.

## Summary and Conclusion

In most Middle Eastern countries, approaches to the diagnosis and subsequent treatment of cancer differ from approaches found in Western countries, including the United States. In many Middle Eastern countries, patients often prefer that their families are the first to know about their disease and to agree to prospective treatment protocols (Silbermann, 2011). Whereas, in Western societies, the patient is usually the first to know, understand, and agree to the proposed therapeutic procedures (Armeli et al., 2001).

Differences between Middle Eastern and Western approaches toward cancer may stem in part from Islamic practices and culture. In the Arab world, religious and social structures are difficult to separate and Islamic religious culture may dictate practices and approaches related to health care, including the nondisclosure of bad news, medical decisions, spiritual needs, end-of-life care, and palliative care for patients (Aljubran, 2010).

According to most Arab cultural belief systems, illnesses are understood in religious terms and for Muslims may be considered tests of faith or punishment for sins (Mahfouz et al., 2013). Additionally, in Arab cultural belief systems spiritual well-being can influence psychological functioning (Mahfouz et al., 2013). In the Muslim world, religious culture provides meaning to individuals and helps them to cope with suffering and loss. Furthermore, religious culture and leadership often provide the necessary support for individuals when dealing with serious illness, such as cancer, and may help to facilitate PTG (Pargament et al., 2011). The purpose of this qualitative study was to explore the experiences of Omani women diagnosed with breast cancer and to gain a better understanding of how PTG may contribute to healing and wellness in breast cancer survivors in Oman. According to Ahmad, Muhammad, and Abdullah (2010) prayer, meditation, and self-disclosure, for example, may assist in PTG. The knowledge gathered from this literature review helped to develop the methodology for this study, which included snowball techniques, purposive sampling, and in-depth interviews.

The findings of this study may be used to inform the treatment and care of Muslim patients who have suffered from serious illness, such as breast cancer. Positive

changes have been associated with increasing survival, coping with illness, reducing stress, anxiety, and depression in the areas of mental and public health. Patients who experience these positive changes after surviving breast cancer may be better prepared for consultation in various mental, religious, and spiritual areas of their lives (Esmat, Hajian, Simbar, & Zayeri, 2015). Hence, health care providers and counselors who understand these changes can facilitate appropriate and effective care and counseling for breast cancer survivors. The cognitive processing of trauma into growth may be achieved using self-disclosure in counseling sessions. When individuals can share their stories within a supportive social context, they may integrate the trauma into their new life narratives, obtain affirmation and support from loved ones, and cognitively process the events.

# Chapter 3: Methodology

## Introduction

The purpose of this qualitative study was to explore the experiences of Omani women diagnosed with breast cancer and to gain a better understanding of how PTG may contribute to healing and wellness in breast cancer survivors in Oman. An understanding of Omani women's perceptions of their QOL during treatment, as well as posttreatment, may offer insights to healthcare providers. This may enable healthcare providers to promote patients' wellbeing, reduce patients' stress levels, and help patients better adapt to their illness. In the literature on PTG, researchers have documented that increased PTG may give positive meaning to the lives of cancer survivors, making them more compassionate, humble, and generous (Bussell & Naus, 2010; Carver, 2010; Janoff-Bulman, 1992; Mols et al., 2009; Sears et al., 2003).

In the face of coping challenges, trauma survivors often discover new personal strengths and possibilities (Taku et al., 2009). According to Carver et al. (1989), self-strengthening and self-discovery during PTG are triggered by survivors' struggles. Pain, suffering, and struggle help strengthen and teach individuals about their undiscovered strengths and potentials. Janoff-Bulman (1992) stated, "What doesn't kill us makes us stronger" (p.103). Tedeschi and Calhoun (2004) explained that positive changes could lead to psychological preparedness that may teach trauma survivors to confront subsequent challenges with effective coping skills and less anxiety. Omani women with breast cancer may feel empowered and can cope with subsequent traumas as they learn to manage the trauma and suffering they experienced in the past (Helgeson et al., 2006;

Patton, 2002; Tedeschi & Calhoun, 1996, 2011). By collecting the stories of Arab women who may have experienced PTG, this study may provide information for future researchers in Oman to further explore the concept of PTG and its application to breast cancer survivors.

This chapter contains a discussion of the research design, as well as the methodological considerations and procedures about the study. First, the research design is discussed, including the rationale for using a qualitative method. Then, the role of the researcher is described, followed by the methodology. Finally, issues of trustworthiness and ethical procedures are presented. The chapter ends with a summary of the chapter's main points.

## Research Design and Rationale

In this study, I investigated the following research questions:

1. During their cancer-free post treatment period, what changes, if any, took place in these Omani women's lives that they attribute to their breast cancer experience?
2. During their cancer-free post treatment period, what were the qualities if any, that these Omani women identified as essential for coping with breast cancer?
3. During their cancer-free post treatment period, what experiences, if any, did these Omani women identify as indicators of personal growth?

The central phenomenon in this study was PTG in Omani women breast cancer survivors. PTG refers to positive changes, including higher levels of psychological

functioning, that individuals experience following adverse and challenging events (Tedeschi & Calhoun, 2004). As individuals move on from traumatic events, they may experience change, and through the process of recovery, may discover positive characteristics and strengths that they can apply to their current lives.

The research tradition selected for this study was a qualitative phenomenology. Qualitative phenomenological research comprises a focus on the participant's subjective understandings of everyday life and how she or he interprets the actions of others and self as meaningful (Creswell, 2007). This type of research may generate future research questions that may be explored using both quantitative and qualitative methods. In qualitative studies, the researcher serves as the instrument for collecting data through procedures such as in-depth procedures and observations. There were two main reasons for me choosing this research method. Due to the lack of study and information available on PTG in Oman, I decided to conduct a qualitative study to understand the personal experiences of breast cancer survivors and the associated changes they may experience due to their breast cancer diagnosis. To excerpt a detailed account of the experiences of Omani breast cancer survivors, more detail-oriented methods need to be used, such as semi structured and in-depth interviews, which are only possible through the qualitative approach. Also, qualitative researchers can provide an opportunity for insight into growth. A qualitative study provides the opportunity for the participant to provide in-depth detail of her lived experiences in her own words.

Creswell (2007) noted that qualitative phenomenological research is an inductive method that begins with studying participants' lived experiences in a natural context.

Researchers in the qualitative tradition attempt to understand the meaning of the experiences by identifying themes and patterns. Qualitative research generates a holistic picture of an issue or problem and identifies the complexities involved within the problem being researched. Qualitative researchers emphasize an understanding of the participants' lived experiences through in-depth interviews and observations in natural settings. The qualitative phenomenological research method can be used to explore the meanings of the lived experiences of individuals in an attempt to identify the essence of their lived experiences.

I selected the qualitative phenomenological research methodology because this method will help to understand Omani women's experiences with breast cancer concerning their post treatment experience. The qualitative approach was significant because no study on this phenomenon has been conducted in Oman, and this study could give a voice to Omani women to share the pain of their cancer experience.

The qualitative method is a progression of exploring lived experiences from the inside rather than from the science of measurement (Webb, 2013). Additionally, qualitative methodology can provide a rich collection of data regarding an individuals' experiences following trauma. This research is designed to capture the complex experience of PTG in Omani women suffering from breast cancer. This study was exploratory and flexible to gain an understanding of the complex and subjective nature of posttraumatic experiences of Omani women with breast cancer. The majority of research on posttraumatic functioning has focused on either positive or negative result using quantitative methods; this study was mainly designed to capture a comprehensive picture

of the phenomenon without imposing prior hypotheses that may hinder understanding. Although numerous studies (Bert, 2011; Caldwell et al., 2005; Cobb et al., 2006; Diener, 2009; Joseph & Linley, 2008; Kagawa-Singer, 2008; Kallay, 2007; Linley & Joseph, 2004; Park, 2005; Roesch et al., 2004) related to PTG have been conducted in Western countries, such studies are scarce in Middle Eastern nations. Schilling (2006) posited that qualitative approaches are most appropriate when researchers intend to gather and explore data related to individuals' lived experiences.

Other qualitative designs were rejected as they were not compatible with my research questions. In the grounded theory research, the researcher attempts to produce a theory about a phenomenon that is grounded in the data from the individual's lived experiences (Patton, 2002). A theory about a particular process, interaction, or action is developed by studying a significant number of participants, typically from 15-30 in-depth interviews. In the narrative design, the researcher studies the stories narrated by the participants regarding their real-world, lived experiences. Narrative researchers focus on one or two persons. The gathered data include the participants' stories about the experiences and their meanings in a chronological manner (Patton, 2002). Ethnographic research is a study of an entire cultural group. Ethnographic researchers often submerge themselves in culture and conduct in participant-observer research by watching and recording behaviors and interactions in everyday life (Schilling, 2006). The case study approach, which has a history in psychological literature, involves the study over time of an event through one or two cases in an enclosed system. Multiple sources of information, such as interviews, observations, reports, and documents are used to explain

a case in detail related to an analysis of particular themes (Patton, 2002). I used the phenomenology design, which included the use of open-ended questions, to determine what breast cancer women experienced related to the phenomenon and what types of contexts or situations influenced their experience.

## Role of the Researcher

I assumed the role of an observer in this study. In qualitative research, the researcher is considered an instrument of data collection. Data are gathered through a human instrument, rather than through inventories, questionnaires, or machines (Denzin & Lincoln, 2003). The qualitative researcher describes relevant aspects of self, including any biases and assumptions, expectations, and experiences to qualify his or her ability to conduct the research (Greenbank, 2003). Qualitative researchers use epoche to set aside or bracket preconceived notions about the study phenomenon. I identified and set aside any preconceptions regarding PTG while I interviewed participants and analyzed the data. Epoche will be described in detail in this chapter. My role as an observer in this study involved engaging with the participants in in-depth interviews, tape recording the interviews, and having the recordings transcribed to text for analysis.

I am currently involved in the administration of a major teaching hospital in Oman, but I am not involved in clinical practice. I had no direct interactions with patients. To control or reduce the influence of bias on the interpretation of participants' experiences, I used a procedure known as epoche. Epoche refers to abstaining from judgment and ordinary ways of knowing, perceiving, and understanding experiences, objects, and situations (Moustakas, 1994). In the process of epoche, the researcher

articulates his or her own experiences and brackets these experiences during data collection and analysis (Wong, 2008). I set aside my personal experiences and biases regarding breast cancer survivors and PTG as I collected and interpreted the data for this research project.

## Methodology

The population studied included Omani women who had been treated for breast cancer. According to Aziz et al. (2008), one out of every five Omani women lives with breast cancer. The sampling strategy for this study was purposive sampling. Purposive sampling is appropriate in qualitative research because it allows the researcher to recruit participants who have direct experience with the study phenomenon. Purposive sampling was suitable for this study because data from a particular group (i.e., Omani women who have been treated for breast cancer) were required to address the research questions.

To be included in the study, the participants had to be Omani women who were at least or above 18-years-old and who had been treated for breast cancer. I also included participants who were no less than 2 years post treatment and not greater than 5 years' posttreatment. The time elapsed since the diagnosis of cancer and possible development of PTG is a controversial issue. According to Cordova et al. (2001) and Evers et al. (2005), PTG has been identified several years after the traumatic experience or illness. For example, Barthakur et al. (2010) used two quantitative measures, The Post-Traumatic Growth Inventory (PTGI) and Benefit Finding Scale (BFS), to examine and assess PTG in a sample of young patients who had completed cancer treatment on average 1.6 years earlier. Barthakur et al.(2010) found that most of the adolescents experienced PTG. PTG

has also been reported in adults who are on average 5.7 years past going through spinal cord injuries (Chun & Lee, 2008), as well as in survivors of heart disease irrespective of the time since diagnosis (Sheikh, 2004). In their study of breast cancer patients, Collin and Young (2001) found positive psychological changes approximately 3 years after the breast cancer treatment. Lehman et al. (2001) suggested that there are incidents in which PTG may occur soon after facing trauma or may take years to develop. There is no definite time frame found in the literature for the development of PTG. In addition, Oman officially established a Cancer Registry Department approximately 7-10 years ago. Since then, all the government, private hospitals, and social service organizations in the country are mandated to report cancer patients to the Cancer Registry Department (Lawati, Kumar, & Jaffe, 2008). Before this, no official system was in place to report cancer patients in Oman. Due to the above-mentioned studies on the PTG time frame and to get the most authentic information on breast cancer patients in Oman, I decided to select 2-5 years as a parameter of the sample in this study.

Participants were selected from a population of breast cancer survivors who were not in treatment due to their breast cancer experience. Potential participants were contacted initially by phone for a 10-minute prescreening phone interview to explain the purpose of the study and the informed consent document (Appendix A). During this brief interview, I also determined if the participants met the inclusion criteria for this study. PTG was defined to the participants as a-positive psychological change experienced as a result of the struggle with highly challenging life circumstances that allows the person to rise to a higher level of functioning (Tedeschi & Calhoun, 2004). In this case, the

challenging life circumstances were the participants' breast cancer diagnoses. Following this initial contact, I sent the informed consent form to the participants through standard mail or via encrypted e-mail, at their discretion, and asked them to send a signed copy back to me through either standard mail or by scanning and e-mailing the document. Once I received a participant's informed consent form, the interview was conducted.

Participants were selected through the use of purposive sampling and the snowball technique. In the snowball technique, the participants suggest other potential participants who may be willing and interested in participating in the study (Nelson & Allred, 2005). I began the snowball sampling by contacting the managers of multiple breast cancer support groups and cancer clinics in Muscat. The centers and managers were provided with flyers (Appendix A) and my contact information. These individuals were briefed about my study and asked to think of someone they knew who met the criteria for this study. If someone they knew met the criteria and would like to participate in my study, these women could contact me through contact details included on the flyers. Also, a flyer (Appendix D) was posted in the local support groups for breast cancer patients and in the offices of medical providers who may have regular contact with breast cancer patients. Additionally, Muscat Online Support Groups for Breast Cancer Survivors were requested to post the recruitment flyer on their online message boards. Following the prescreening interview, I phoned the participants to schedule a single 60-90-minute, in-person interview followed by a 10-minute debriefing session at the end of the interview. The interview and the debriefing was conducted by me.

Based on recommendations for phenomenological research by Guest et al. (2006), I planned to recruit eight participants for this study. The number of participants in a qualitative study depends upon the number required to gather the essential elements of the phenomenon being studied. the sample size is sufficient when additional interviews do not provide new information or result in recognition of new themes; this is when data saturation is achieved. researchers use saturation as a guiding principle during the data collection process (guest et al., 2006). Therefore, if data saturation was not achieved after interviewing eight participants, I would have continued interviewing additional participants until saturation is reached. In addition, Smith and Osborn's (2003) wrote: There is no right answer to the question of the sample size. Phenomenological studies have been published with samples of one, four, nine, and fifteen. As a rough guide, we propose five or six as a reasonable sample size. This provides enough cases to examine similarities and differences between participants but not so many that one gets overwhelmed by the amount of data generated. (p. 54).

## Instrumentation

The instrumentation in this study consisted of an interview protocol that I created based on previous literature on PTG (Appendix B). Data were gathered using a semi structured interview guided by three research questions that were posed in a flexible and conversational manner while seeking to capture the essence of the questions. Creswell (2007) identified that in a qualitative study, the use of open-ended questions about what participants have learned and experienced and what types of situations or contexts influenced the experience is preferred. Additionally, open-ended interviews allow the

researcher to identify the expressed daily life situations, beliefs, values, attitudes, opinions, and knowledge base of the respondents (Denzin & Lincoln, 2003). I created the interview questions derived from the literature on PTG. The goal was to have an interview guide but also to remain open and flexible to discuss topics as they emerge naturally during the interview. I provided flexibility in probing and in determining when it was appropriate to explore certain subjects in greater depth, or even to pose questions about new areas of inquiry that were not originally anticipated. Before conducting the interviews for the study, the interview protocol was reviewed by a panel of experts in the field to establish content validity. Modifications were made to the interview protocol based on the panel's suggestions.

### Procedures for Recruitment, Participation, and Data Collection

After gaining approval from Walden University's Institutional Review Board ([IRB] Approval #06-18-18-0236738), I conducted the interviews over 2-week period. Potential participants contacted me directly via e-mail or telephone to schedule the prescreening interview. During the prescreening interviews, participants' eligibility for the study was determined, and participants also received an explanation of the study purpose and procedures. The prescreening interviews took approximately 10-15 minutes each and were conducted in-person or via telephone. The participants who met the study criteria were scheduled for a single 60-90-minute in-person interview, which was conducted in a mutually agreed upon quiet, private location. Each interview was recorded using a digital audio recording device. At the end of the interview, I conducted a 10-minute debriefing session, during which the participants were given opportunities to

share their experiences and concerns, and ask questions about being involved in this dissertation study and the interview process. Lastly, the participants were provided with contact information of local professional counseling services (Appendix C) in case they experienced distress while participating in the study.

## Data Analysis Plan

The qualitative data analysis technique used in this study was thematic content analysis. Content analysis is a qualitative research technique and includes three approaches: conventional, directed, or summative (Weber, 1990). All three approaches are used to interpret meaning from the content of text data, and adhere to the naturalistic paradigm (Schilling, 2006). The differences among the approaches are coding schemes, origins of codes, and threats to trustworthiness. In a conventional content analysis, coding categories are derived directly from the text data, while in a directed approach, the analysis starts with a theory or relevant research findings as guidance for initial codes. The goal of a directed approach to content analysis is to extend or validate a theoretical framework or theory in a new context. Utilizing an existing theory or research on the topic can help the researcher to focus the research questions (Sears et al., 2003). Thus, it can help guide the initial coding scheme or the relationships between codes (Sears et al., 2003). A summative content analysis involves counting and comparisons, usually of keywords or content followed by the interpretation of the underlying context (Schilling, 2006). For this study, I chose to use a directed approach to content analysis because prior research already exists regarding the phenomenon of PTG, and thus may help me to focus the research questions.

The audio recordings of the interviews were transcribed into text documents. The text documents were then interpreted by rigorously reading for coding and then rereading to identify themes. To provide a better direction and clarity for the study only the relevant responses were used for coding. To differentiate between the 35 initial codes color coding was utilized. The codes were then organized into 33 subthemes, by combining similar themes when needed. Next, the transcripts were analyzed and interpreted using content thematic analysis, which consisted of coding the data, forming the themes, shaping and defining the codes and themes, and then interpreting the results (Urcuyo et al., 2005). Transcripts were read multiple times and analyzed in detail to define the themes related to positive changes after receiving a breast cancer diagnosis. Initial codes were categorized into meaningful themes and subthemes, and I revisited the data until no new themes emerged. Lastly, I evaluated the themes and subthemes and in the results report, included excerpts and quotations provided to highlight the emergent themes and to identify any discrepant cases.

## Issues of Trustworthiness

Trustworthiness in qualitative research is analogous to the concepts of validity and reliability in quantitative research. Creswell (2007) noted that qualitative researchers created an alternative standard of validation that matches the specific dynamics of naturalistic study. Simon (2011) explained the concept of trustworthiness in qualitative research is a means to verify the quality of the data. According to Simon, trustworthiness includes several factors: credibility, dependability, transferability, and confirmability. Credibility refers to the accuracy of the findings, while dependability refers to the extent

that the results can be replicated (Simon, 2011). Simon ascertained that transferability is the extent to which other researchers can draw similar conclusions in different settings. Whereas confirmability refers to the extent that the results reflect participants' views rather than the researcher's biases (Simon, 2011).

As posited by Lincoln and Guba (1985) techniques have been used to enhance and verify the trustworthiness of qualitative research results. As such, I used several techniques to establish the trustworthiness and authenticity of the findings. To ensure credibility, I conducted interviews until data saturation occurred and followed the process of phenomenological horizonalization (Moustakas,1994). Additionally, I read and reread all of the interview transcriptions to identify meaningful statements and expressions of each participants' breast cancer experiences, particularly related to their experience of PTG.

To ensure transferability, I used thick description to delineate details about the participants, the context of the interviews, procedures related to in-depth interview questions, and the recruitment process. To ensure dependability, I maintained and reviewed all field notes, transcripts, and digital recordings multiple times, and carefully document all the raw data created throughout the process. To ensure confirmability during the process of data collection and analysis, I used bracketing to identify and set aside my preconceptions and biases. I kept listening the tape recordings multiple times to ensure Iam not leading or dictating my participants' responses.

## Ethical Issues

Before beginning the study, participants signed an informed consent form that stated the purpose of the study, the voluntary nature of their participation, and their right to withdraw from the study at any stage in the process. I will ensure that all collected data is kept confidential and secure, by storing both written and tape forms in a locked cabinet in my residence for a period of 5 years. All data was password-protected on my personal computer, and I followed all of the requirements of Walden University's IRB related to informed consent and confidentiality, including the exclusion of the participants' personally identifying information from the final study report. Due to the sensitive nature of the subject matter, such as revealing their stories and recalling disturbing past experiences with breast cancer, at the completion of the interview participants were provided information on counseling services (Appendix C) to ensure that they did not experience long-lasting negative effects from the study. These counseling services may assist participants in coping with the negative feelings related to painful memories of breast cancer and its treatment.

## Summary

In this chapter, I reviewed the purpose of the study and the rationale for the research design. The purpose of this qualitative study was to explore the experiences of Omani women diagnosed with breast cancer and to gain a better understanding of how PTG may contribute to healing and wellness in breast cancer survivors in Oman. This qualitative design included a semi-structured interview protocol guided by three research questions. The population, sampling procedure, and data analysis were also reviewed in

this chapter. The population from which the sample was drawn consists of Omani women who had been treated for breast cancer. The sampling procedure was carried out using purposive sampling and the snowball technique. Finally, the data was analyzed using thematic content analysis. The next chapter includes descriptions of the process by which I collected, stored, and analyzed the data.

# Chapter 4: Results

## Introduction

PTG refers to the "positive psychological change experienced as a result of the struggle with extremely challenging life situations" (Joseph, 2009, p. 25). An individual who experiences PTG attains enhanced levels of acclimatization, psychological functioning, and/or life awareness relative to functioning before the trauma (Tedeschi, Calhoun, & Cann, 2004). The purpose of this qualitative study was to explore the experiences of Omani women diagnosed with and treated for breast cancer and their perceptions of any positive PTG following their breast cancer experience. The research questions designed for participants about their breast cancer experience were the following: During their cancer-free post treatment period, what changes if any, took place in these Omani women's lives that they attribute to their breast cancer experience? During their cancer-free post treatment period, what were the qualities if any, that these Omani women identified as essential for coping with breast cancer? During their cancer-free post treatment period, what experiences if any, did these Omani women identify as indicators of personal growth?

This chapter includes a description of the setting, demographics, data collection, data analysis, evidence of trustworthiness, results, and summary.

## Setting

This study was conducted with eight Omani women in Muscat, the capital city of Oman. I met the participants in a library, a doctor's office, and meeting rooms of

nonprofit organizations. There were no organizational or personal changes from Chapter 3 that influenced the interpretation of study results. The settings were the same as decided at the beginning of the study.

## Demographics

All eight women were Omani, with different backgrounds. Out of eight women, five were born and raised in Oman, and three were not born in Oman but obtained citizenship by marrying Omani men and staying in the country for the last 20 years. All women were Arabic speaking and lived in the capital city, Muscat, except one who was from the interior of Oman. Two Omani women received only basic high school education but were working in the government offices. The remaining six had bachelor's degrees but were now housewives. All eight female participants were married, with an average age between 34-65 years.

## Data Collection

In this study, I interviewed eight Omani women and identified and analyzed common themes from the interview transcriptions. In terms of their illness history, all had been diagnosed with and treated for breast cancer but were in remission for the last 2-5 years. None were on any medication at the time of giving the interview. In addition to their distinctive diagnosis and treatment options, each participant in this study had a unique personal story. Each of these women had self-reported life changes and cognitive and personality changes after their diagnosis and treatment of cancer. Names and personal information of the participants were excluded to protect their privacy.

All six participants responded to flyers posted on the nonprofit organization, clinics, and websites; Two participants responded after learning about the study from other participants. I conducted the interviews over a 2-week period from June 7 to June 22, 2018, by meeting these participants once a week.

The format of the interviews was semi structured, with participants answering a series of questions related to their breast cancer experience, coping with cancer, and any change they experienced after their treatment. All of the participants were allowed to answer the questions in any manner and style they saw fit within the full-time frame of 60 to 90 minutes. Most of the interviews lasted 40-60 minutes. I audio recorded each interview. Several women provided casual and irrelevant information about their experience that was not related to breast cancer experience; therefore, after they answered the research questions, I turned off the recording device.

I transcribed the interviews and formed a file for each participant that contained the informed consent, brief biographical data, and the interview transcriptions. I systematized the paper files according to each participant's initials and labeled a case number from one to eight. I kept these written data in a locked file cabinet at my residence. Only I had access to the file cabinet.

Interviews were audiotaped in a relatively private setting, including the private rooms of clinics and nonprofit organizations, for quiet and privacy. I downloaded each recording to my password-protected personal computer, and then I labeled the file with the participant number and transcribed them into a Word document.

## Data Analysis

I followed the process of phenomenological horizonalization (Moustakas,1994), meaning that I read and reread all of the interview transcriptions to identify meaningful statements and expressions of participants' breast cancer experiences, particularly their experience of PTG. The text was interpreted in three phases. In the first phase, the data obtained from all of the interviews were rigorously read and reread separately for coding and identifying the pattern by using thematic analysis method (Braun &Clarke, 2006) Only the relevant responses were used for coding to give a better direction and clarity for the study. The codes were organized into 33 subthemes, combining similar themes when needed. Most themes were common to all of the eight interviews. Most of the respondents came from similar social backgrounds. In the second phase, categories were created, where the themes were assimilated to form broader themes for data reduction and efficient analysis. In the third phase, each of the themes was defined and explained to form a comprehensive analysis. In the succeeding sections, the themes were verified, along with their explanation and description. The themes and codes identified from the analysis is explained below.

### Impact of Cancer Experience

The participants expressed their experience with cancer.

**Wrong diagnosis in the early stage.** Four of the eight participants reported that they had an incorrect diagnosis of their condition at the early stage. The doctors they consulted first regarding a lump formation in these four cases did not take it seriously and assumed it to be normal. In the case of Participant Q, her cancer grew to reach the second

stage because she did not get any proper treatment for almost 2 years, and her regular doctor could not identify the condition. For Participant R, the first two doctors she met at the initial stage were not ready to give her a proper checkup because they thought it was normal. These four participants reported that they had the wrong diagnosis of their condition at the early stages.

**Geographical relocation**. Six out of the eight participants had to travel outside Oman to have access to a better treatment facility for cancer. Thus, geographical relocation was a part of their cancer experience. Travelling outside had a financial, physical, and emotional impact for the patient as well as their support resources.

**Physical problems**. Five out of eight participants reported that there were not many physical symptoms before they were diagnosed with cancer. Feeling a lump was the only sign reported by these participants. Only two participants reported pain or other signs. The physical problems were reported mostly during the treatment stage. All seven participants described a "need to carry tubes around" or "having to depend on others for everything" as the major physical effects of their condition.

**Emotional trauma**. I found a correlation between religiosity and emotional trauma. Participants who reported themselves to be rooted in religion and believed that their suffering was from Allah reported no shock or fear and were able to take the condition and diagnosis as any normal stage of life. However, the respondents who were identified to be less religious reported that they were scared, shocked, and depressed when they got to know about their condition. A participant expressed her experience as:

> Yes, it shook us terribly and then coming to terms with it that I have something like this because we had just heard about it, but in the family, there is no history, nobody, and everybody was shocked. His family, my family, everybody was shocked. So, it was a nightmare we were going through.

**Family trauma**. According to Participant Y, "it affects my family more than myself." The family members, especially husbands of the patients, were emotionally affected by the wife's condition. The condition also affected the normal life of the family members as they had to find time and resources to take care of the patients.

**Questioning**. This characteristic was identified as having a close relation with religiosity. The participants who were identified to have an affiliation with religion and faith in God reported that they never questioned the condition. They viewed the condition as a prewritten test from God. The participants who reported that they repeatedly raised questions like "Why me?" were identified to have a weaker relation with religion during the initial stages of treatment.

**Personal Resources**

Personal resources are the emotional, cognitive, and physical resources an individual has; these resources contribute to a person's growth in different aspects of life in dealing with threats. For all of the respondents who participated in the study, there were identifiable personal resources that helped them in coping with the experience. These included the following:

**Personal strength.** The participants indicated that personal strength was a factor in dealing with the experience of cancer. Most of the respondents viewed themselves as

having a strong personality. They reported to have remained strong throughout the experience. They were positive toward the treatment and had complete faith in their recovery capacity. Four of the respondents gave examples when they were able to comfort their family members who were emotionally traumatized by their condition. One of the participants said, "I told them don't worry. It will be ok." Another said, "I have always been a person who doesn't break down; but will always be positive, but I am sure something good will come out of this."

**Positivity.** All of the respondents replied that they were positive towards the future throughout the stages of treatment and that was a contributor to the successful recovery from the disease. Positive view towards their condition contributed to their personal wellbeing during the experience. The response from a participant was "I knew about cancer but (smile). I just feel very calm. I feel I will be treated and recovered." Another said, "You must believe that you will survive. It is all here in the mind. The brain is the most important organ."

**Spirituality.** Seven out of eight were religious, and they saw this stage of life as just a test from God. They were confident about a cure throughout the stages of treatment, and only one was not concerned about the disease as she believed everything was prewritten. The respondents stated that spirituality and faith in God was the major reason for successful recovery. This also helped them in remaining positive throughout, and they went with their normal life. There was a difference in the responses of participants who viewed themselves to be highly religious. The people who were not religious reported that they were shocked or scared when they learned about their

condition, but the respondents who had stronger religious affiliation reported that they were not concerned because they believed that everything was from God. A participant responded that "I just had faith in God. The faith was that I will be cured."

**Experience in dealing with chronic illness.** Five of the eight participants had previous experience dealing with chronic illness, either with themselves or with someone close to them. The people with experience were reported to be more positive and less scared about their condition. They seemed to have dealt with the situation without panic. A respondent said:

> I don't find any changes because I was always a very positive person in my life. I have taken a lot of things. I have got my son with muscle atrophy. I have a daughter who has bipolar. I have my mother who is even worse as she was in coma for five months. I managed with her.

**Health consciousness.** Although health consciousness did not impact the occurrence of the disease, it can contribute to the the detection of the disease. Five of the eight respondents did regular health checkups and were cautious about their physical health. However, following healthy practices did not contribute to preventing the condition. A respondent reported, "I was shocked after I detected cancer as I was following a healthy lifestyle."

**Social Resources**

Along with an individual's personal coping resources, the social resources play a role in the wellbeing of a human being in a society. Social support systems are a coping resource in dealing with traumatic situations of life. The respondents had sufficient social

support systems in dealing with the cancer stage in their lives, and they viewed these resources as contributing toward their recovery. All of the seven participants reported that their social support systems were family, peers, medical experts, and economic resources.

**Family support.** Family was a factor during the treatment stages of cancer. All of the participants reported that they had family support and care in going through the experience. For all of the women who participated in the study, husbands were the most important support source, followed by the rest of the family. When asked about factors that contributed to coping with the condition, family support was at the top of the list, along with spirituality. As the condition directly affects the physical and mental ability of the individual, family support can assist in these areas. All of the participants reported the participation of family members throughout the stages of treatment. One of the participants said, “My sister, then my husband came afterward, and then my mother and then my children, they were all with me.”

**Peer support.** A participant stated, **“**Person who has gone through the experience will know how to help more than anybody else.” Four of the eight participants of this study received peer support, and they all reported to have a positive effect in dealing with the disease. One of the participants decided to get immediate attention for the condition after receiving advice from a friend who underwent the treatment. Participant Y also mentioned, “Interactions with people who had gone through the treatment gives me the feeling that I am not alone with this experience. Peer support was a resource that helped me in dealing with cancer.”

**Expert support.** The support from experts in the field of treating the condition was important in the recovery of all of the respondents. Every participant of the study had access to the attention of expert doctors and consultants in the field of cancer treatment. All of the participants reported their doctors to be compassionate, which contributed to their physical and mental health. Also, as four out of eight participants had experience with misdiagnosis in the early stages of cancer, medical expert support in later treatment was important for their recovery. Patients who travelled abroad to access better treatment facilities reported, "The doctors in the Western world used to explain everything to me, the details, the tests, ultrasounds." According to Participant Y, "I was in Anderson and I saw what is happening there with the patients, how much support they were getting." Another respondent also commented on the positive interaction with her doctor:

> There was one doctor who said he believed in the holistic approach, he told me the procedure and said you may get claustrophobic, you may negatively think when you go through this, don't think, think about the positive light, which enters your body and convince yourself about positive thoughts.

**Economic resources.** The economic resources of the participants were vital in their treatment. Most of the participants were from well-to-do economic backgrounds. Most of the participants had their treatment in a foreign country with better resources for treating. Thus, economic resources were a factor in affording better treatment. One of the participants reported that she had to make her husband stay in Oman without accompanying her during treatment in order to avail financial support through insurance. She stated:

> At first, my husband and I were here. At first, he told me, no I am going to quit, and I am going to Brazil with you. I will take care of you and then I had to be strong and think, and I told him now I need you here working because I need the health insurance in Brazil.

**Personal Change**

More than half of the participants in the study reported that their breast cancer experience had changed them as a person. Change in personality was one of the significant themes noted by the data. Based on the participants' experience, subthemes such as acceptance, calmness and tolerance, compassion, and closeness to religion were revealed.

**Acceptance**. All of the participants were able to accept their situation or condition. This was reflected in their acceptance of a change in lifestyle, physical conditions, and social relations brought on by the cancer experience.

**Calm and tolerant**. Although two of the eight participants identified themselves as calm and tolerant even before the experience, the others reported that the experience of dealing with the condition made them calm and tolerant. One participant reported, "I was very aggressive in conversation not letting the other person speak, but this had changed after the cancer experience." Another reported, "I have become more tolerant with my family, especially children." The participants began by taking things lightly rather than feeling too much stress. A participant said, "I think after that, I am much stronger, I am much more mature after that. I always have some kind of explosive personality, but I am much calmer."

**Compassion.** Six of the eight participants reported that they have become compassionate. They believed that they had achieved the capacity to understand the emotions of others. Some of the participants reported that they had tried to help individuals who were undergoing a similar stage by sharing experiences and trying to provide motivation to maintain a positive outlook. Participant Y initiated the idea of Oman Cancer Association, a nonprofit organization for cancer patients. A participant responded, "One thing before this cancer experience, you will speak, I will cut you off before you even finish your sentence. So, I tend to be more and more compassionate definitely now."

**Non-materialistic**. Seven of the eight participants responded that they had lost interest in material things and were now concentrating on non-materialistic things. A participant responded, "I don't say that money is not important, but insaniyat, (humanity) the akhlaq (good will; compassion) is most important." Additionally, seven of the eight participants shifted their attention away from material possessions and toward relations. For two of the participants, their concern about their looks vanished and they no longer viewed it to be of importance. One respondent said:

> Now I am not into materialistic things. I don't care about things anymore, before that I just thought of whitewash and house décor. When I went for treatment to India my husband came back earlier and joined the office, he gets done half the things before I came back, I saw that home and said there is no need to decorate, just put things in right place. We are happy as it is.

**Supportive to other patients**. All participants indicated that after their own experiences they try to support and comfort other patients suffering from cancer. Participant Y, who attempted to start the Oman Cancer Association, is the best concrete example of this support. According to another participant in the study:

> When I talk now with the patients with cancer, with the other women, the first thing I told them, it spreads in my lungs, liver, and bones. I told them, do like what I did. She asked, what you did? I said do like me, when you take the chemo, stay with yourself and just imagine that the chemo is going direct to the tumor and it is killing the tumor.

**Faith.** Seven out of eight participants reported that they had faith that they would recover from the condition. They reported receiving comfort and healing from their religious faith and practices, and they also felt psychologically calm and comfortable. These participants also asserted that faith contributed towards their ability to keep a positive outlook. A respondent commented on the role of faith in her life, "The treatment was there, but the faith made me believe that in the end, the things are to be fine." Another participant stated, "The acts of Salah (prayers) and Dikhr (a devotional ritual of Islam in which short prayers and phrases are repeatedly recited silently within the mind or aloud) made me feel relaxed and in peace."

**Posttraumatic Growth**

Posttraumatic growth is an individual's experience of substantial positive changes arising from stressful and negative life events (Calhoun et al., 2007). The more agonizing and difficult an event is to overcome, the greater the chance of experiencing growth. In

other words, the opportunity to experience growth increases with the gravity of the stressor (Cordova & Andrykowski, 2007). The process of PTG allows the individual to reach a higher functional level (Calhoun et al., 2000) than before the trauma. I considered breast cancer to be a traumatic experience that affects the overall well-being of an individual. As such, PTG can be identified through the responses of participants in this study in the form of publicly recognizable growth. For example, as seen in the case of Participant Y, who responded to her cancer experience by developing the Oman Cancer Association. In addition, PTG can also be identified in the form of personal growth as seen in the other cases in this study. For instance, Participant A's decision to help other cancer patients by volunteering in the oncology unit of the main cancer hospital in Muscat alludes to personal growth.

**Stronger personality**. Six out of eight women reported that their personality became stronger as a result of dealing with breast cancer. The traumatic experience had a positive effect by increasing their personal strength and ability to deal with difficult life situations with a calm attitude. When asked about the personality change, one participant responded:

> This experience made me stronger, more positive, and I like my life, I like it that because of my cancer I love life more and appreciate my life not take things as granted as life gave me so much through this experience. I have become stronger more. I kind of slowed down and don't take things for granted. I have new appreciation for life, my family. I take the time to appreciate myself and start taking care of myself, because I am important too.

**More positivity toward life**. Six out of eight participants reported that the experience created a more positive outlook toward life. The experience increased their confidence and hope, which contributed to the development of a positive personality, which was then reflected in their relationships with others.

**Social commitment**. Seven out of eight participants reported that they became more compassionate. This was reflected in the increased desire to help others, as identified from the responses. According to one of the participants:

> I feel much sadness about people who are less fortunate than me, like what is in Syria. Things like that, and things I see in the news. I feel people with poverty and people doing badly, I feel terribly sad about that and I feel very ashamed about the government in the UK because they are doing uncaring things and there are so many people that could be helped.

**Stronger relationship with the family**. All the participants reported developing closer relationships with their family. All the respondents reported that their family became one of the most important coping mechanisms during their experience. Facing and surviving breast cancer contributed to making relationships stronger, which is supported through this response from a participant when asked about the change in relationship with her family, "I think we are much closer now than before."

**Stronger spirituality/religiosity**. Six of the eight participants in the study reported that they became more religious after their illness. For them, maintaining a close relationship to God was already important, but the level of closeness they felt was increased after surviving breast cancer. Others reported a growth in either spirituality or

religiosity levels. According to one of the participants, “I spent so much time reading the Quran and knowing what it is in Quran, I became more spiritual, somehow I don’t know how or whatever but now I am closer to Allah.” Most participants reported that they became more religiously committed after their cancer diagnosis. Praying all prayers, offering Dua (an act of supplication) to Allah, and listening and reading the Quran more consistently than before, were the most obvious changes reported after a cancer experience. One participant said:

I used to pray and was religious before my sickness. But now I read the Quran more frequently, I offered more Dua to Allah and performed Qiyam Al-Layl (the night prayer which involves getting up from sleep at night to pray). I also read one or two chapters of the Holy Quran every day. I never did this before cancer.

Some participants reported that they adjusted their way of praying as the result of cancer treatment. These alterations allowed them to remain spiritually active, as one participant said:

I used to get tired when performing prayers in usual standing manner after cancer. I was unable to perform prostration for a long time, so I started doing prayer on a chair. But I do my prayers very well, all praise be to Almighty Allah.

**Priority change**. Experiencing cancer brought about changes in priorities at various levels for the participants. One priority to change was the participants’ viewpoints regarding what was important and what was not. When a participant was asked about the changes in her priorities after the traumatic experience, she said:

> My priorities change. The priority becomes family. Family comes first. Every minute I wanted to spend with my children. Priorities greatly change. When friends ring me now and they tell me they like to meet. I would make everything possible to go and meet them, while before I used to just say look, I don't have the time.

**Greater importance to relationships**. One clearly identifiable change occurred within the participants relationships. Six of respondents reported that in terms of time spent and resources used, they tried to prioritize family and friends more than anything else. One of the participants responded, "I took early retirement. I like to be with family more now." While another stated, "I think it has really changed me and the relationships became closer and sort of minor things became less important."

**Lack of interest toward material possessions**. Additionally, the participants reported that they had become less materialistic. Their priorities have changed from material things, such as money, luxury, and beauty, to personal relationships and spirituality.

**Personal looks became less important.** Another area in which priorities changed was personal appearance. Most respondents reported that they cared less about their looks than before their cancer experience. According to one of the participants of the study, "When I saw my hair less on the head in the mirror, I thank God that I saw my real head beautiful without hair, it is a beautiful thing."

**Philosophy of life.** The experience brought change to most of the participants of the study, and this change contributed to realizations that altered the philosophy of their

lives. A change in life philosophy includes an increased appreciation for life, changed life priorities and enhanced spirituality (Tedeschi & Calhoun, 1996).

**Focused on the future**. Six of the respondents reported that they no longer wasted time thinking about the past and became more focused on the future, looking for possibilities to make the best use of the time they have. According to one respondent, "I think the main change in me is that I feel I need to move on, I need to do some things like traveling to different places, to do different kinds of things which I always wished for."

**People-oriented**. All the participants who reported a change in themselves after the experience also reported becoming more people-oriented. Some participants stated that they no longer cared much about their career or material possessions, such as money, but concentrated more on building relationships and spending time with people and friends.

**Prosocial**. Seven out of eight respondents who reported a change in themselves, after their experience, began emphasizing prosocial behavior. Some made voluntary attempts to help people who were going through either breast or other cancers. The creation of the Oman Cancer Association project portrays an example of this change to a participant's prosocial philosophy. Some even reported that they felt an increased suffering for people who they did not personally know.

**Identified Discrepancy**

Two of the participants reported that after suffering through breast cancer they had not experienced all the changes identified in PTG. To understand the discrepancy, I analyzed the data based on both the personal characteristics and individual experiences of

the subjects. Participant 6 and Participant 8 expressed that they experienced no change in their lives after enduring cancer. I identified several personality characteristics of the participants that contributed to such an experience. First, both participants reported that they had a positive personality before the experience and were found to have emotional strength. Additionally, both participants identified deep levels of spirituality and faith, which were factors that contributed to their experience. Both participants reported that they believed the disease to be from Allah (God), and as such were expected to happily accept it. This belief system made them perceive the situation not as a threat, but a test that Muslim believers should undergo to express their obedience to Allah. Thus, I identified that Participants 6 and 8 did not perceive this experience as traumatic, which was supported by Participant 8's response that "I knew about cancer, but I just feel very calm. I was not afraid at all. I was a positive person even before this experience. My connection with Allah and my family was very strong even before cancer." She linked her ability to calmly accept her diagnosis as a result of her strong spirituality and faith: "I just had faith in God. The faith was that I will be cured." Participant 6 also reported that she was not anxious or scared, "I have always been a person who does not break down, but I was always a positive person, and was sure something good will come out of this. Allah gave me this disease and will also cure me. I always like a strong woman. I never break by life crisis. So, cancer brought no change in me." These two participants viewed cancer as simply another experience and tried to continue with their normal life. Thus, they identified no change in their faith and personality but found changes in other domains of PTG.However, other participants of the study expressed breast cancer

experience to be traumatic and observed subsequent changes in various aspects of their lives.

## Evidence of Trustworthiness

Qualitative researchers (Schultz et al., 2010; Jassim & Whitford, 2014) emphasize studying participants in their natural environment with the researcher as the data collection instrument. This viewpoint is different from conventional quantitative research and objective reliability and validity. Lincoln and Guba (1985) use the concept of trustworthiness in qualitative research to confirm the quality of the data. Trustworthiness includes several elements: credibility is expressed as the accuracy of the study results, comprising the structural description of the phenomena being studied (Cordova et al., 2001); transferability, is the ability of other researchers to draw similar conclusions; dependability is a factor of reliability; and conformability is the process that allows authentication of the results.

Credibility was achieved in this study through prolonged engagement, bracketing, data triangulation, and purposive sampling (Lincoln & Guba, 1985). Prolonged engagement was accomplished by spending enough time collecting data to get a maximum understanding of the participants and the phenomenon being studied. I continued interviewing participants until data saturation was reached. Additionally, I established a trust and rapport with the participants, and participants were provided a full hour or more to voice their stories. The interviews ranged from 40 to 60 minutes in length. Data triangulation occurred through writing field notes in detail and sample selection (e.g., different ages and different geographical regions).

Transferability was accomplished by using both a thick description of the settings and the participants, and through purposive sampling (Creswell, 2013). In this study, I established transferability through using a purposive sampling method, enlisting the participants from different regions of Oman, and data saturation to get a detailed and rich description of the phenomenon by those who had experienced it (Creswell, 2013). One purpose of thick and rich description is to assess the extent to which the findings are transferable and relevant to other settings, times, and situations (Lincoln & Guba, 1985). This was accomplished in this study by providing demographic details of the participants, including gender, age, education level, ethnicity, and religious affiliation, as well as providing detailed explanations regarding data collection and analysis processes. Another purpose of thick description recognized by Creswell (2013) is to design a narrative that provides readers with a sense of participants' thoughts, perceptions, and emotions. This was obtained in this study by recording the interviews and using verbatim quotes.

Dependability was achieved through data triangulation. Data triangulation involved maintaining and reviewing all the field notes, transcripts, and digital recordings multiple times. Last, data triangulation involved carefully documenting all the raw data generated.

I transcribed the interviews verbatim from Arabic to English and then reviewed them multiple times to ensure the accuracy of the transcribed and translated data. I conducted repeated readings and coding of narrative text to accurately deduce meaning units (major themes and subthemes) and to understand the structural descriptions of the core phenomena.

Confirmability was established through participant feedback and verbatim quoting, as well as a careful review of field notes. However, conformability is a cumulative process that requires other researchers to conduct studies on this dissertation topic or to replicate this study and confirm or repudiate the findings of the current study.

## Results

My first research question was: During the cancer-free period, what were the qualities Omani women identified as essential for coping with breast cancer? For this research question, I intended to identify the personal resources that contributed to coping with the disease. Through the analysis of responses from the participants, I identified five types of personal resources that helped participants deal with the traumatic experience. These resources were: personal strength, positivity, spirituality, the experience of dealing with chronic illness, and health consciousness. Reponses that contributed to the identification of these resources included the response of one participant who said, “I am positive.” While another responded, “we are very cautious people, health conscious.” Another participant revealed the contribution of spirituality: “I just felt that God is there, and I just need to pray.” Whereas another respondent indicated the role of personal strength of the participants: “I said I don’t want to see any sad faces okay. I want to see everybody smiling and everything will be fine, and we are going to be good.” Still another stated, “I have always been a person who does not break down, but I will always be positive, but I am sure something good will come out of this.”

In addition to personal resources, I intended to identify other resources that contributed to successfully undergoing the traumatic experience. I identified four kinds of

social resources that helped the participants deal with the traumatic experience. These resources were: family support, peer support, expert support, and economic resources. According to one of the participants of the study, “I think having my husband and family that was very important. My friends as well.” Another said, ‘I saw in the western countries that when we were waiting for treatment how the volunteers came to support us and think something we didn’t have in our hospital in Muscat. They will connect you with somebody who has gone through cancer.” While another participant responded that “this particular doctor there, he is just kind and pleasant and nice.”

The second research question asked: During their cancer-free period what changes if any, took place in these Omani women’s lives that they attributed to their breast cancer experience? For this research question, I intended to identify the changes observed in the women as a result of the breast cancer experience. Through the analysis of responses from the participants, I identified that all participants felt more connected to life and that they had a greater appreciation for the beauty of life and this world. Additionally, participants indicated that they get more pleasure from life, and that they are happier. One participant said, “I learned I have so many reasons to be happy,” whereas another said, “I recognized what is important in my life.”

Through the analysis of responses from the participants, I identified six areas of personality change in the participants. The participants reported that after their experience they had an increased acceptance of other people and difficult situations. They reported that they have become more compassionate towards people facing difficulties and that they have become calmer and more tolerant, especially when dealing with their family

members and friends. Most of the participants reported that they have lost interest in material possessions and have begun to concentrate more on personal relationships. Additionally, most of the participants have reported a change in their personality, which has resulted in their becoming more supportive towards other patients. Further, most participants reported that faith became a major component of their personality after the experience.

The third research question was: During their cancer-free posttreatment period, what experiences, if any, did these Omani women identify as indicators of personal growth? In this third research question, I addressed the growth in the cancer survivors as observed by themselves and others. One participant said, "I felt that I had to do more. You know, as if I did not have time." The participants' growth was observed in six areas: personality, priority changes, attitude towards life, social commitments, relationships, and spirituality. Participants reported that their personalities had become stronger after undergoing the experience. Further, six of the participants reported that their attitude towards life became more positive, and social commitments became a more important part of their life. The participants' growth was also identified through building stronger relationships with family and higher levels of both spirituality and religiosity. The response of one of the participants to address the changes in their personality was:

> I never had so big problem in my life. So, when I had this big problem and all the things were completely opposite, so my life changed completely. So, when the doctor told me the diagnosis, I just thought that, okay, so I have a problem and I have to deal with that now. My Allah will help me in this as He did in the past.

Most participants indicated that the breast cancer experience caused them to look at their lives with a positive outlook by turning to Allah and through deep devotion and faith in Him. They further asserted that they grew closer to Allah as time went on. They believed that breast cancer was a test from Allah, hence, they surrendered to Him and were satisfied with His will.

I identified six areas of personality change in the participants. The participants reported that they began to show more acceptance to other people and difficult situations after the experience. They reported that they had become more compassionate toward people in difficulty. The participants also reported that they had become calmer and more tolerant, especially when dealing with their family members and friends. Most of the participants reported that they had lost interest in material possessions and started to concentrate more on personal relationships. Most of the participants, reported a change in their personality and became supportive of other patients than before. Most women shared they feel more confident, more humble and more mature. They attributed this change to their cancer experience. Some people reported that faith became a component of their personality after the experience.

One participant expressed the change in their priorities as, “The life before was to go to work, provide for my family, do my exercise, my health. But now the purpose changed to help someone and help my family.” Additionally, participants reported that family became the primary priority, and most of them preferred to invest more time with family than anywhere else. Material possessions became less important for some participants, who reported that they were more concerned about relationships after their

cancer experience. Some participants also reported that they no longer cared about how they or things in their home looked.

The change in life philosophy was identified from the participants who became more focused on the future. Most of them preferred to leave their traumatic experiences behind and to move forward with life. According to one of the participants, "I think the main change in me is that I feel I need to move on." Another identified change in their life philosophy as gaining a new focus on relationships and becoming more people-oriented. One respondent said, "Now I can see life different, I see people different, for example, I don't care that much about small things that before I cared about. I can appreciate even more the people who love me." A prosocial behavior change can also be identified as a change related to the philosophy of life.

There was a discrepancy in the data obtained from Participant 6 and Participant 8, who according to the responses indicated there was no major change in their life particularly spirituality growth or personality after their cancer experience. This discrepancy can be understood in the context of how the participants viewed their situation. The respondents never saw the experience as traumatic, rather they assigned it to a higher power and focused on acceptance of their diagnosis at a spiritual level.

## Summary

The aim of this study was to identify and understand the potential experience of PTG in Omani women who had undergone diagnosis and treatment of breast cancer. I used a qualitative approach, with interviews, observation and recording as the data collection method for the study. Eight Omani women who had undergone breast cancer

experience within the last 5 years were identified for the sample. Interviews were conducted with them in order to gain knowledge about their personal experiences during the period of diagnosis and also any positive personal changes that they observed in themselves after the treatment. The interviews were transcribed and analyzed using thematic content analysis.

Most of the women who participated in the study reported that they experienced a change in themselves after the experiences. The findings were that personal resources, and social resources, were the major contributors to coping with the breast cancer. The personal resources included the individual's personal strength, positive attitude toward life, spirituality, previous experience, and health consciousness; social resources included support from the family, from peers, attention of experts in the field of cancer treatment, and the economic resources available to the individual.

Most of the participants in the study were affected by an incorrect diagnosis in the earlier stages of the disease. The experience also resulted in emotional trauma for the individual. It was also reported to be a traumatic experience for the family of the survivors. Geographical relocation and physical problems faced by the affected individual and family were part of the experience.

Participants reported personal changes from their traumatic experiences of diagnosis and treatment. Some Individuals developed a more accepting, calm, and tolerant personality with the experience. Another positive change was that the individuals became more compassionate toward other human beings, whether they knew them or not. Another common characteristic identified by several participants was the development of

a non- materialistic personality. They also grew more supportive of patients similar to themselves, which was characterized by an increased level of faith. PTG was identified in the form of a stronger personality, positivity, increased levels of social commitment, stronger relationships with the family, and higher levels of spirituality. Most participants narrated that their religious beliefs and practices helped them to forget the bad thoughts related to breast cancer and to recover from this illness.

Participants noted that their priority changed as a result of their traumatic experiences. Most of the participants reported that their primary priority changed from work or other material achievements to family and personal relationships. Material things became less important, and most started investing in relationships. Personal presentability or looks became less important with the experience of going through the traumatic period of life. I also observed that the experience contributed to a change in a philosophy of life. The participants developed a future-oriented and people-oriented philosophy of life.

In Chapter 5, I discussed limitations of study, recommendations, implications and my conclusion.

# Chapter 5: Summary and Conclusion

## Introduction

The purpose of this study was to explore the actual experiences of Omani women, postdiagnosis of breast cancer. A phenomenological, qualitative methodology was used to understand the women's perceptions of positive growth, following their encounter with breast cancer. The complex and rich stories of the participants who encountered PTG, not only aided this study to highlight the areas that require further research, but also increased the understanding of the need to expand traumatic research and its application for cancer patients in Oman. The studies associated with cancer in Oman are primarily focused on the promotion of the medical aspect and the adverse effects of breast cancer (Al Lawati et al., 2013); however, these studies failed to shed light on the life of cancer survivors after diagnosis and treatment of the illness (Al Lawati et al., 2013). As the existing studies on cancer in Oman are mainly quantitative in nature, they do not provide an in-depth understanding of the traumatic effects and complex meanings associated with breast cancer within the broader context of the life of women in Oman (Al-Shannaq, 2017).

International researchers have suggested that PTG or positive changes are common among cancer patients (El Saghir et al., 2007; Ismail et al., 2013). No study to date has been conducted on PTG on patients with breast cancer. The traumatic nature of breast cancer has received attention over the last decades (Hebert et al., 2009). Omani women with breast cancer exhibit uncertainty, fear, depression, and anxiety (Al-azri, 2013). Traumatic events, however, can also initiate positive changes (Hobfoll et al.,

2007). The results of this study demonstrated that breast cancer can also lead to a deeper, richer, and more satisfying life experience for many women. If patients experience growth following their illness, they can adjust better to their illness and gain more satisfaction from life.

I found that most of the participants experienced positive changes. The recurring themes in participants' responses included appreciation of life and stories that include stability, spiritual prosperity, and effective interaction. These are also the most prominent features established within the literature on posttraumatic psychological growth experienced by the people who handled traumatic events (Jassim & Whitford, 2014; Schultz et al., 2010)

## Interpretations of Findings

The research process included interviewing eight Omani women and analyzing common themes from the interview transcriptions. The qualitative study focused on the positive psychological changes experienced by Omani women diagnosed with breast cancer. The results revealed that breast cancer affects women's health multi dimensionally, producing negative and positive changes in their lives.

Consistent with the findings of the previous studies (Ganz et al., 2009) the results from the current study demonstrated that for the participants, the challenges of breast cancer brought an increased appreciation of life for all of them. Based on past research, Hobfoll et al. (2007) reported similar experiences from the narratives of Turkish women breast cancer survivors. The present study results are aligned with past research, which suggested that as a breast cancer survivor, Islamic spirituality is a fundamental facet of

living (Schultz et al., 2010; Jassim & Whitford, 2014; Al-Shannaq, 2017).Participants from the past studies and in this study believed that their breast cancer experience contributed to an increase in their spirituality; this finding proved consistent with previous qualitative findings from a study on Arabic women diagnosed with breast cancer (Jassim & Whitford, 2014; Schultz et al., 2010).

In this study, the participants cited their spirituality as a source of emotional comfort, inner strength, hope, and healing. The participants advocated the belief of Allah in the Qur'ãn, "And we send down the Qur'an that which is healing and mercy for the believers" (Quran 17:82). The participants' inner strength and hope to endure the burden of living with breast cancer was primarily derived from Allah and the people around them (their children, husbands, families). A study on Bahraini women with breast cancer explicated similar findings (Jassim & Whitford, 2014).

The findings of this study were consistent with the results of other studies, which advocated that religion and God help the patients cope with cancer (Lewis et al., 2008; Jassim & Whitford, 2014; Prati & Pietrantoni, 2009). Aligned with these other studies, I found that the religious approach was vital to Omani women's ability to deal with challenges related to breast cancer. Calhoun et al. (2000) and Prati and Pietrantoni (2009) have also suggested a positive relationship between spirituality and religiousness and cognitive progressions and perceived growth.

However, spirituality is an intricate concept, which may not only facilitate PTG, but also promote its decline (Wong-Kim, Sun, and Dematttos, 2003). The findings related to the correlation between religion and PTG generated concern. Given that religion

provides individuals with stability and with a schema that comprises the potential for suffering and with an explanation for the suffering, PTG would be less likely to occur. In order to experience positive growth, a person's assumptive world must be shattered. Those with strong coping capacities, given the support provided through spirituality and religion, may not be sufficiently challenged by the trauma (Tedeschi & Calhoun, 2004).

In line with Tedeschi and Calhoun's (2004) research, the two participants in this study who failed to portray PTG may have failed to do so because they already possessed strong coping capacities. These coping capacities were most likely due to spiritual bonding and high levels of religiosity that the participants described, such that these participants did not feel especially challenged by their breast cancer experiences.

The second theme obtained from the participants' narratives was discovering the other aspects of life. Some participants implied that the diagnosis of cancer resulted in the attempts to reevaluate the meaning of life and enjoy it more by concentrating on significant values such as relationship and present moment. I noted that the participants' priorities changed after the diagnosis of cancer; though these changes may be expressed as positive emotional changes experienced because of adjustment with highly challenging events of life, such as cancer.

Some women stated that they experienced a new sense of responsibility with respect to other patients who were in the same situation. They revealed an inclination to empathize with the other patients. Prati and Pietrantoni (2009) noted that due to breast cancer, 43% to 53% of the respondents appreciated life more, changed their priorities to be more reasonable, and became convinced of their strength.

A transformation in the participants' perceptions were witnessed as they did not view breast cancer as a death sentence after its diagnosis. At the time of the interviews, the participants had already successfully dealt with the treatment of cancer and its side effects, demonstrating that breast cancer can be healed and cured, leading to a long and healthy life during survivorship. The participants specified that they relied on their faith in Allah. Thus, their Islamic beliefs and practices offered guidance and comfort to deal with the news of being diagnosed with breast cancer and control the fear of death. The belief of the participants was in harmony with other Arabic qualitative studies on a similar topic (Al-Azri et al., 2013; Jassim & Whitford, 2014).

Another dimension of PTG is social support. Social support aids the cognitive processing of trauma into growth through the use of self-disclosure (Tedeschi & Calhoun, 2004). The development of their own individual stories within a supportive social context provides cancer survivors with the opportunity to integrate the trauma into their new life narrative, obtain affirmation and support from loved ones, and cognitively process the event (Tedeschi & Calhoun, 2004). Tedeschi and Calhoun (2004, 1995) noted that the stability and quality of relationships must be considered during the determination of growth, as the ability to self-disclose with others who have experienced similar trauma may provide hope. The participants mentioned feeling a sense of pleasure after the diagnosis by meeting their need for attachment and affection; this made them realize the importance of interpersonal relationships. Consequently, the survivors reserved more time for the people they recognize, tried not to hurt others, depicted more tolerance, and were more associated with people.

Cancer survivors also described their illness as generating positive consequences in their interpersonal relationships. Ganz et al. (2002) indicated that the most prominent positive change following cancer is witnessed in relationships. The participants of two other studies on breast cancer, stated that the illness brought the family members closer and made them more sensitive towards familial issues (Linley & Joseph 2004; Ganz et al., 2002). The present study's findings align with previous studies in the context of social support and suggest that women diagnosed with breast cancer in Oman obtain most of their support from their families during the course of their diagnosis and treatment.

The fourth dimension involved with PTG perception in this study was increased personal strength. Kagawa (2008) believed that psychological growth and intense feelings are the vital elements of PTG in cancer patients. People learn lessons when confronted by a trauma, thereby equipping themselves with skills such as increased experiences about life, self-confidence, and personal strength. The newly acquired skills develop their personality characteristics, initiating growth. Consequently, it can be inferred that living with a trauma like cancer affects an Omani woman's evaluation of her capabilities to face future predicaments.

The results of the current study indicate that the diagnosis of cancer also initiates radical and positive changes in the survivors' lives, in addition to an increased appreciation of life. Subsequently, after their cancer diagnosis, the participants stated that they came to value their health, their time, and their life with friends and family. Past phenomenological and qualitative research revealed through the narratives of several cancer survivors that a cancer diagnosis eventually cultivated an increase in joy and an

appreciation for life (Linley & Joseph 2004; Ganz et al., 2002). This was also evidenced in participants where a cancer diagnosis encouraged them to modify their priorities and life philosophies and to become more spiritual (Linley & Joseph 2004; Ganz et al., 2002).

The findings of the current study further exposed that PTG was positively associated with the education level of breast cancer survivors. Overall, most of the women participants were college graduates, currently working before retirement. This data aligned with the results of the study on breast cancer patients in Hong Kong (Linley & Joseph, 2004). The individuals with a higher level of education approached problems from a broader perspective, exhibiting an optimistic explanatory style during negative life events and thus, reporting greater PTG (Linley & Joseph, 2004). Lastly, the present study results suggest no substantial relationships between PTG and age, which is similar to previous studies on age and PTG failed to suggest that PTG is related to age (Kleiman, 2004). However, the results of some previous studies found younger cancer patients reported a higher level of PTG (Ismail et al., 2013; Linley & Joseph 2004; & Ganz et al., 2002), nevertheless this study did not suggest this association.

From the theoretical framework perspective, there are several stories in Islamic culture that are also true interpretations of PTG. Islamic traditions view suffering, for some circumstances, as a way for preparing oneself for the journey to heaven (Subandi, Achmad, Kurniati, & Febri, 2014). Muslim beliefs and values can be beneficial for viewing traumatic life events as somehow transcendent of the current time and place, and situating trauma as part of life, which then supports the development of PTG. The Holy Qur'an (Qur'an 17:84) teaches that the truly righteous Muslims are those who sustain

hardship, peril, fortitude, and misfortune while being patient in affliction, pain, and poverty.

## Limitations

The present study also possessed some limitations. The first limitation is that the participants self-reported all responses; therefore, the probability of related bias could exist. Based on the nature of interpretative studies, this study aimed to provide detailed information about the perception of PTG in Omani women, not to generalize the findings to other groups. Nevertheless, because the results were aligned with the results of many other studies (Lewis et al., 2008; Vilhauer, 2007; Jassim & Whitford, 2014; Prati & Pietrantoni, 2009) it can be suggested that some cancer patients outside the Omani culture could potentially have the same PTG development and perceptions as participants in this current study. In addition to the participants' biases I also kept track of my emotions and attitudes. In order to ensure that the results and interpretations represented the perceptions and experiences of the participants. I kept listening the tape recordings multiple times to ensure Iam not leading or dictating my participants' responses.

Additionally, the sample size of this study included eight women who were diagnosed and treated for breast cancer, which is considered a relatively small sample. As such, the sample size made it difficult to generalize the results to other Omani female breast cancer survivors. However, generalizability to a target population is not the main goal of qualitative studies. Rather the goal is to give researchers an indication of prominent areas to explore using quantitative and qualitative studies within future trauma survivor populations (Creswell, 2013; Schultz et al., 2010).

Thirdly, all the recruited participants were Omani women; thus, the findings cannot be generalized to other women diagnosed with breast cancer in different Arabic countries and cultures. Furthermore, only one participant, out of the eight, was living outside the capital city of Muscat. This suggests that this participant's experience may not exactly represent the experiences of survivors living in the interior city boundaries of Muscat. A final limitation is that only breast cancer survivors were included in the present study and there is a great probability that different cancer types may affect PTG differently.

## Implications for Social Change

This study adds to the Omani literature about the psychological aspects of breast cancer, and PTG and its subsequent impact on Omani women diagnosed with breast cancer. Implications for social change may be seen in the changes that study participants reported experiencing within their own lives and communities, as well as the health care system of the country, and in their society. Additionally, participants in this study may, for the first time, be able to think consciously about their own personal growth and what it means to grow from trauma. It is possible that some participants were able to become involve in some cathartic activity, such as talking about their trauma, which may be a catalyst for further growth in the future. This individual growth may also be a catalyst in the growth of other Omani women throughout their social circles and network.

Social change can also take place within the Omani community through igniting further study of PTG, as well as supporting grant and programming ideas for creating awareness about PTG in various health care organizations, including both government

and private hospitals. Program development could proceed in the direction of activities which may help to promote the concept of PTG in the health care system of Oman. Furthermore, social change in the Oman health care system may be initiated through the education of healthcare providers who treat women with breast cancer. The implication for an attitudinal change in the Oman healthcare system is great if psychologists are hired as active participants in cancer units. As part of the core medical team, the psychologists can help in creating the social change through a positive approach, which will enable cancer survivors to successfully adapt and cope with their illness.

## Recommendations for Future Research

This study was conducted to explore the experiences of Omani women diagnosed with and treated for breast cancer, as well as to gain a better understanding of how PTG may contribute to the healing and wellness of breast cancer survivors in Oman. To generalize findings from research, it will be imperative for future research to focus on cancer survivors of various types and stages of cancer, located in the geographic regions of Oman, and with varied demographic backgrounds. The research must also center on personality as a pre-trauma variable that depicts openness to experience (Creswell, 2013; Kleiman, 2004; Moustakas, 1994; Tedeschi & Calhoun, 2004; Linley & Joseph, 2004), conscientiousness, agreeableness (Kleiman, 2004; Lopez & Willis, 2004; Wojnar & Swanson, 2007), and extraversion (Creswell, 2013; Kleiman, 2004; Moustakas, 1994; Tedeschi & Calhoun, 2004; Zoellner & Maercker, 2006; Linley & Joseph, 2004) are interrelated with PTG (Creswell, 2013; Kleiman, 2004; Moustakas, 1994). Though Tedeschi and Calhoun (2004) explained that the personality traits of extraversion,

optimism, and openness to experience are positively related within the dimensions of personal strength and new possibilities, there are researchers who have failed to determine a relationship between these personality traits and PTG (Caldeira, Carvalho, & Vieira, 2013). Additionally, there is a need for future studies to focus on the personality characteristics of Omani women, which may contribute to and facilitate growth.

## Conclusion

The results of the current study and an awareness of the positive changes that occurred in the lives of Omani women after experiencing breast cancer showed that inspite of all of the short and long-term burdens of cancer, the life of cancer survivors was changed for the better. These women learned to manage distress and sufferings in a better manner. Their religious faith was brought to the forefront and pervaded in all aspects of survivorship. Medical care providers are often seen as insensitive because they failed to treat the patients as a whole person. When medical providers better understand the impact of PTG on their patients, it will lead to more effective whole person treatment that includes psychological counseling and medical treatment for breast cancer survivors in Oman. The hope is that this will eventually make breast cancer survivors more resilient to cope with the impending crisis. The findings also demonstrate that a holistic, multi-faceted model of oncology care is vital for fulfilling the needs of Omani breast cancer survivors.

Since the study was the first of its kind to examine the psychosocial aspect of breast cancer and the concept of PTG, this study may make a significant contribution to the scarce qualitative literature in Oman.

# References

Agarwal, G., Ramakant, P., Sánchez Forgach, E. R., Rendón, J. C., Chaparro, J. M., Basurto, C. S., & Margaritoni, M. (2009). Breast cancer care in developing countries. *World Journal of Surgery*, *33*(10), 2069-2076. doi:10.1007/s00268-009-0150-z

Ahmad, F., Binti Muhammad, M., & Abdullah, A. A. (2010). Religion and spirituality in coping with advanced breast cancer: Perspectives from Malaysian Muslim women. *Journal of Religion and Health*, *50*(1), 36-45. doi:10.1007/s10943-010-9401-4

Ahrens, C. E., Abeling, S., Ahmad, S., & Hinman, J. (2010). Spirituality and well-being: The relationship between religious coping and recovery from sexual assault. *Journal of Interpersonal Violence, 25*(7), 1242-1263. doi:10.1177/0886260509340533

Ai, A. L. (2008). International terrorism and mental health: Recent research and future directions. *Journal of Interpersonal Violence, 23*(3), 339-361. doi:10.1177/0886260507312292

Ai, A. L., Tice, T. N., Peterson, C., & Huang, B. (2005). Prayers, spiritual support, and positive attitudes in coping with the September 11 national crisis. *Journal of Personality, 73*, 763-791. https://doi.org/10.1111/j.1467-6494.2005.00328.x

Akhu-Zaheya, L. M., & Alkhasawneh, E. M. (2012). Complementary alternative medicine use among a sample of Muslim Jordanian oncology patients.

*Complementary Therapies in Clinical Practice, 18*(*2*), 121-126. https://doi.org/10.1016/j.ctcp.2011.10.003

Al lawati, J. A., Al lawati, N. A., Al Siyabi, N. H., A. L. Gharbi, D. O., & AL Wehaibi, S. (2013). Cancer incidence in Oman, Muscat: Ministry of Health.

Al-Azri, et al. (2013). Psychosocial impact of breast cancer diagnosis among Omani women. *Oman Med J, 29*(6), 437-444. doi:10.5001/omj.2014.115

Al-Azri, M. H., Al-Awisi, H., Al-Rasbi, S., & Al-Moundhri, M. (2013). Coping with a diagnosis of breast cancer among Omani women. *Journal of Health Psychology*, *19*(7), 836-846. doi:10.1177/1359105313479813

Al-Azri, M., Al-Hamedi, I., Al-Awisi, H., Al-Hinai, M., & Davidson, R. (2015). Public awareness of warning signs and symptoms of cancer in Oman: A community-based survey of adults. *Asian Pacific Journal of Cancer Prevention*, *16*(7), 2731-2737. doi:10.7314/apjcp.2015.16.7.2731

Al-Madouj, A. M.., Eldali, A.M., & Al-zahrani, A. S. (2011). *A 10-year cancer incidence Among nationals of the GCC States, 1998-2007.* Riyadh, Saudi Arabia.: Gulf Center for Cancer Control and Prevention.

Al-Mahrooqi. R. (2010), Omani women, past and today, *Sultan Qaboos University Journal, 89*,156-167.

Al-Moundhri, M., Al-Bahrani, B., Pervez, I., Ganguly, S., Nirmala, V., Al-Madhani, A., Grant, C. (2004). The outcome of treatment of breast cancer in a developing country—Oman. *The Breast*, *13*(2), 139-145. doi: 10.1016/j.breast.2003.10.001

Al-Mundhiri, Z. A. (2000). *The translation of the meanings of Sahih Muslim*. Saudi Arabia: Darussalam Publishers and Distributors.

Al-Sharbati, Z., Hallas, C., Al-Zadjali, H., & Al-Sharbati, M. (2012). Sociodemographic and clinical characteristics of patients attending psychotherapy in a tertiary care hospital in Oman. *Sultan Qaboos University Medical Journal*, *12*(1), 25-32. doi:10.12816/0003084

Alam, A. (2006). Knowledge of breast cancer and its risk and protective factors among women in Riyadh. *Annals of Saudi Medicine, 26*, 272-277. Retrieved from http://www.annsaudimed.net/

Aldwin, C. M., Levenson, M. R., & Spiro, A. (1994). Vulnerability and resilience to combat exposure: Can stress have lifelong effects? *Psychology and Aging*, *9*(1), 34-44. doi:10.1037/0882-7974.9.1.34

Aljubran, A. H. (2010). The attitude towards disclosure of bad news to cancer patients in Saudi Arabia. *Annuals of Saudi Medicine, 30*, 141–144. https://doi.org/10.4103/0256-4947.60520

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.

American Psychiatric Association. (2015). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.

Andysz, A., Najder, A., Merecz-Kot, D., & Wójcik, A. (2015). Posttraumatic growth in women after breast cancer surgery– preliminary results from a study of Polish patients. *Health Psychology Report, 3*(4), 336–344. https://doi.org/10.5114/hpr.2015.52383.

Armeli, S., Gunthert, K. C., & Cohen, L. H. (2001). Stressor appraisals, coping, and post-event outcomes: The dimensionality and antecedents of stress-related growth. Retrieved from http://www.guilford.com/cgi-bin/cartscript.cgi?page=pr/jnsc.htm

Askay, S. W., & Magyar-Russell, G. (2009). Post-traumatic growth and spirituality in burn recovery. *International Review of Psychiatry, 21*, 570–579. doi:10.3109/09540260903344107.

Avis, N. E., Crawford, S., & Manuel, J. (2005). Quality of life among younger women with breast cancer. *Journal of Clinical Oncology, 23*(15), 3322-3330. https:/doi.org/10.1200/jco.2005.05.13

Aziz, Z., Iqbal, J., & Akram, M. (2008). Predictive and prognostic factors associated with survival outcomes in patients with stage I–III breast cancer: A report from a developing country. *Asia-Pacific Journal of Clinical Oncology*, *4*(2), 81-90. doi:10.1111/j.1743-7563.2008. 00152.x

Baldacchino, D. R., & Buhagiar, A. (2003). Psychometric evaluation of the Spiritual Coping Strategies scale in English, Maltese, back-translation and 150 bilingual versions. *Journal of Advanced Nursing, 42(6)*, 558-570. Retrieved from http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-2648

Barthakur, M., Sharma, P., Chaturvedi, S., & Manjunath, S. (2010). Posttraumatic growth

in women survivors of breast cancer. *Indian Journal of Palliative Care, 22*(2),157-162. https://doi.org/10.4103/0973-1075.179609

Bellizzi, K. M., & Blank, T. O. (2006). Predicting posttraumatic growth in breast cancer survivors. *Health Psychology*, *25*(1), 47-56. doi:10.1037/0278-6133.25.1.47

Bert, S., C. (2011). The Influence of Religiosity and Spirituality on Adolescent Mothers and Their Teenage Children. *Journal Youth Adolescence 40, 72–84.* http://dx.doi.org/10.1007/s10964-010-9506-9

Bleich, A., Gelkopf, M., & Solomon, Z. (2003). Exposure to terrorism, stress-related mental health symptoms and coping behaviors among a nationally representative sample in Israel. *Journal of American Medical Association, 290*, 612–620. https://doi.org/10.1001/jama.290.5.612

Bouchra, H., Karima, R., Fatima, O., Chakib, N., Rachid, B., Ali, M., & Abdelhalem, M. (2016). Quality of life in Arab women with breast cancer: A review of the literature. *Health and Quality of Life Outcomes, 14*(1), 64. https://doi.org/10.1186/s12955-016-0468-9

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101. doi.org/10.1080/07347345903238758

Bower, J. E., Kemeny, M. E., Taylor, S. E., & Fahey, J. L. (1998). Cognitive processing, discovery of meaning, CD4 decline, and AIDS-related mortality among bereaved HIV-seropositive men. *Journal of Consulting and Clinical Psychology*, *66*(6), 979-986. doi:10.1037/0022-006x.66.6.979

Bower, J. E., Meyerowitz, B. E., Desmond, K. A., Bernaards, C. A., Rowland, J. H., & Ganz, P. A. (2005). Perceptions of positive meaning and vulnerability following breast cancer: Predictors and outcomes among long-term breast cancer survivors. *Annals of Behavioral Medicine, 29*(3), 236-245. Retrieved from http://www.springer.com/medicine/journal/12160. 10.1207/s15324796abm2903_10

Burt, M. R., & Katz, B. L. (1987). Dimensions of recovery from rape: Focus on growth outcomes. *Journal of Interpersonal Violence, 2*, 57-81. doi:10.1177/088626087002001004

Bussell, V., A., & Naus, M. J. (2010). A longitudinal investigation of coping and posttraumatic growth in breast cancer survivors. *Journal of Psychosocial Oncology, 28*(1), 61–78. https://doi.org/10.1080/07347330903438958

Cadell, S., Regehr, C., & Hemsworth, D. (2003). Factors contributing to posttraumatic growth: A proposed structural equation model. *American Journal of Orthopsychiatry*, *73*(3), 279-287. doi:10.1037/0002-9432.73.3.279

Caldeira, S., Carvalho, E. C., & Vieira, M. (2013). Spiritual distress—proposing a new definition and defining characteristics. *International Journal of Nursing Knowledge, 24*(2), 77-84.

Caldwell, J., Davis, J. D., Du Bois, B., Echo-Hawk, H., Shepard Erickson, J., Goins, T., ...Stone, J. B. (2005). Culturally competent research with American Indians. *Psycho‐ Oncology, 19*(10), 1094-1101.

Calhoun L. G., Can A., Tedeschi R. G., McMillan J. (2000). A correlational test of the relationship between posttraumatic growth, religion, and cognitive processing. *J. Trauma. Stress 13*, 521–527. 10.1023/A:1007745627077

Calhoun, L. G., & Tedeschi, R. G. (1998). Beyond recovery from trauma: Implications for clinical practice and research. *The Journal of Social Issues, 54*(2), 357-371. doi:10.1111/j.1540-4560. 1998.tb01223.x

Calhoun, L. G., & Tedeschi, R. G. (2006). The foundations of posttraumatic growth: An expanded framework. In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research & practice* (pp. 3-23). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Calhoun, L. G., & Tedeschi, R. G. (2008). The paradox of struggling with trauma: Guidelines for practice and directions for research. In S. Joseph, & P. A. Linley (Eds.), *Trauma, recovery, and growth: Positive psychological perspectives on posttraumatic stress* (pp. 325-337). Hoboken, NJ: John Wiley & Sons Inc.

Calhoun, L. G., & Tedeschi, R. G. (2012). The Paradox of Struggling with Trauma: Guidelines for Practice and Directions for Research. *Trauma, Recovery, and Growth*, 325-337. doi:10.1002/9781118269718.ch16

Calhoun, L. G., Cann, A., & Tedeschi, R. G. (2010). The posttraumatic growth model: Sociocultural considerations. In T. Weiss & R. Berger (Eds.), *Posttraumatic growth and culturally competent practice* (pp. 1-14). Hoboken, NJ: Wiley & Sons.

Calhoun, L. G., Cann, A., Tedeschi, R. G., & McMillan, J. (2000). A correlational test of the relationship between posttraumatic growth, religion, and cognitive processing. *Journal of Traumatic Stress*, *13*(3), 521-527. doi:10.1023/a:1007745627077

Calhoun, L. G., Tedeschi, R. G., & Cann, A. (2007). Evaluating resource gain: Understand and misunderstanding posttraumatic growth. Applied Psychology: *An International Review 56*(3), 396-406. doi:10.1111/j.1464-0597.2007. 00299.x

Cann, A., Calhoun, L. G., Tedeschi, D. T., & Solomon, D. T. (2010). Posttraumatic growth and depreciation as independent experiences and predictors of well-being. *Journal of Loss and Trauma, 15*, 151-166. doi: 10.1080/15325020903375826

Cann, A., Calhoun, L. G., Tedeschi, R. G., Kilmer, R. P., Gil-Rivas, V., Vishnevsky, T., & Danhauer, S. C. (2010). The core beliefs inventory: A brief measure of disruption in the assumptive world. *Anxiety, Stress, and Coping, 23*(1), 19-34. doi:10.1080/10615800802573013

Carver, C. S. (2010). Resilience and Thriving: Issues, Models, and Linkages. *Journal of Social Issues*, *54*(2), 245-266. doi:10.1111/j.1540-4560.1998.tb01217.x

Carver, C. S., & Antoni, M. H. (2004). Finding Benefit in Breast Cancer During the Year After Diagnosis Predicts Better Adjustment 5 to 8 Years After Diagnosis. *Health Psychology*, *23*(6), 595-598. doi:10.1037/0278-6133.23.6.595

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*, 267-283. doi: 10.1037/0022-3514.56.2.267

Casso D, Buist D.S., Taplin, S. (2004). Quality of life of 5-10-year breast cancer survivors diagnosed between age 40 and 49. *Health Quality of Life Outcomes* 25 (2).

Chang, E. C., D'Zurilla, T. J., & Sanna, L. J. (2009). Social problem solving as a mediator of the link between stress and psychological well-being in middle-adulthood. *Cognitive Therapy and Research, 33(1),* 33-49. doi: 10.1007/s10608- 007-9155-2

Chen, J., Zhou, X., Zeng, M., & Xinchun, W.(2015). Post-Traumatic Stress Symptoms and Post-Traumatic Growth: Evidence from a Longitudinal Study following an Earthquake Disaster. *PLoS One. 10(6)*: e0127241.

Chopko, B. A. (2010). Posttraumatic distress and growth: An empirical study of police officers. *American Journal of Psychotherapy, 64*(1), 55-72. DOI: 10.1176/appi.psychotherapy.2010.64.1.55 ·

Christopher and Dana Reeve Foundation. (1995). Caring for people today. Finding cures for tomorrow. Retrieved from https://www.christopherreeve.org

Christopher, M. (2004). A broader view of trauma: A biopsychosocial-evolutionary view of the role of the traumatic stress response in the emergence of pathology and/or growth. *Clinical Psychology Review*, *24*(1), 75-98. doi:10.1016/j.cpr.2003.12.003

Chun, S., & Lee, Y. (2008). The experience of posttraumatic growth for people with spinal cord injury. *Qualitative Health Research, 18*, 877-890. doi:10.1177/1049732308318028

Cobb, A., R., Tedeshi, R., G., Calhoun, L. G., & Cann, A. (2006). Correlates of posttraumatic growth in survivors of intimate partner violence. *Journal of Trauma Stress, 19*(6),895-903. https://doi.org/10.1002/jts.20171

Cole, A. S. (2010). Adjustment of sexual assault survivors: Hardiness and acceptance coping in posttraumatic growth. *Imagination, Cognition, and Personality, 30*, 111-127. https://doi.org/10.2190/ic.30.1.g

Collin, A., & Young, R. A. (2001). New direction for theories of career. *Human Relations, 39* (9), 15-22.

Cordova, M. J., Cunningham, L. L., Carlson, C. R., & Andrykowski, M. A. (2001). Posttraumatic growth following breast cancer: A controlled comparison study. *Health Psychology*, *20*(3), 176-185. doi:10.1037/0278-6133.20.3.176

Cordova, M., Giese-Davis, J., Golant, M., Kronenwetter, C., Chang, V., & Spiegel, D. (2001). Breast cancer as trauma: Posttraumatic stress and posttraumatic growth. *Journal of Clinical Psychology in Medical Settings, 14*(4) 308-319. doi:10.1007/s10880-007-9083-6

Cordova, M.J., Andrykowski,M.A. (2007). Responses to cancer diagnosis and treatment: Posttraumatic stress and posttraumatic growth. *British Educational Research Journal, 39*(6), 991- 110.

Cox, J. W. (1963). Book Review: Man's Search for Meaning: An Introduction to Logotherapy. *Review & Expositor*, *60*(4), 468-468. doi:10.1177/003463736306000445

Creswell, J. W. (2007). *Qualitative inquiry in research design: Choosing among five approaches.* Thousand Oaks, CA: Sage.

Creswell, J. W. (2013). Qualitative inquiry in research design: Choosing among five

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches*.

Davis, C., G., Nolen-Hoeksema, S., & Larson, J. (1998). Making sense of loss and benefiting from the experience: Two construals of meaning. *Journal of Personality and Social Psychology, 75*(2), 561-574. https://doi.org/10.1037/0022-3514.75.2.561

Denzin, N. K., & Lincoln, Y. (2003). The landscape of qualitative research: Theories and issues (2nd ed.). London, England: Sage.

Derogatis, L. R., & Savitz, K. L. (2000). *The SCL-90-R and the Brief Symptom Inventory (BSI) in primary care.* Mahwah, NJ: Lawrence Erlbaum Associates.

Diener, E. (2009). Assessing Subjective Well-Being: Progress and Opportunities. *Assessing Well-Being*, 25-65. doi:10.1007/978-90-481-2354-4_3

Dolbier, C. L., Jaggars, S. S., & Steinhardt, M. A. (2010). Stress-related growth: Pre-intervention correlates and change following a resilience intervention. *Stress and Health, 26*, 135-147. doi: 10.1002/smi.1275

El Saghir, N. S., Khalil, M. K., Eid, T., El Kinge, A. R., Charafeddine, M., Geara, F., & Shamseddine, A. I. (2007). Trends in epidemiology and management of breast cancer in developing Arab countries: a literature and registry analysis. *International Journal of Surgery, 5*(4), 225-233.

Ellison, C. G., Boardman, J. D., Williams, D. R., & Jackson, J. S. (2001). Religious involvement, stress, and mental health: Findings from the 1995 Detroit Area Study. *Social Forces, 80*, 215-249. https://doi.org/10.1353/sof.2001.0063

Elsheshtawy, E. A., Abo-Elez, W. F., Ashour, H. S., & El Zaafarany, M. (2014). Coping strategies in Egyptian ladies with breast cancer. *Breast Cancer, 5*(8), 97-102. https://doi.org/10.4137/bcbcr.s14755.

Ermiah, E., Abdalla, F., Buhmeida, A., Larbesh, E., Pyrhönen, S., & Collan, Y. (2012). Diagnosis delay in Libyan female breast cancer. *BMC Research Notes*, *5*(1), 452. doi:10.1186/1756-0500-5-452

Errihani, H., Mrabti, H., Boutayeb, S., El Ghissassi, I., El Mesbahi, O., Hammoudi, M., ... & Riadi, A. (2008). Impact of cancer on Moslem patients in Morocco. *Psycho-Oncology, 17(*1), 98-100. *Psycho- Oncology,19*(6), 565-579

Esmat, M., Hajian, S., Simbar, M., Zayeri,F. (2015). Post-traumatic growth: a qualitative analysis of experiences regarding positive psychological changes among Iranian women with breast cancer. *Journal of Electronic physician, 7,* 123

Evers, A. W., Kraaimaat, F. W., van Lankveld, W., Jongen, P. J., Jacobs, J. W., & Bijlsma, J. W. (2005). Beyond unfavorable thinking: The Illness Cognition

Questionnaire for Chronic Diseases. *Journal of Consulting and Clinical Psychology*, *69*(6), 1026-1036. doi: 10.1037//0022-006X.69.6.1026

Fallah, R., Keshmir, F., Kashani, F. L. Azargashb, E., & Esmaeel, M. A. (2012). Post-traumatic growth in breast cancer patients: A qualitative phenomenological study. *Middle East Journal of Cancer, 3*(2 & 3), 35-44. Retrieved from http://mejc.sums.ac.ir/index.php/mejc

Falsetti, S. A., Resick, P. A., & Davis, J. L. (2003). Changes in religious beliefs following trauma. *Journal of Traumatic Stress, 16*, 391-398. https://doi.org/10.1023/a:1024422220163

Foa, Cashman, L., Jaycox, L., & Perry, K. (1997). The validation of a self-report measure of posttraumatic stress disorder: The Posttraumatic Diagnostic Scale. *Psychological Assessment, 9*(4), 445-451. http://dx.doi.org/10.1037/1040-3590.9.4.445

Folkman, S., & Lazarus, R. S. (1980). An Analysis of Coping in a Middle-Aged Community Sample. *Journal of Health and Social Behavior*, *21*(3), 219. doi:10.2307/2136617

Frankl, V. (1984). *Man's search for meaning*. New York, NY: Simon & Schuster. Frazier, P., Conlon, A., & Glaser, T. (2001). Positive and negative life changes following sexual assault. *Journal of Consulting and Clinical Psychology*, *69*(6), 1048-1055. doi:10.1037/0022-006x.69.6.1048

Frazier, P., & Burnett, J. (1994). Immediate coping strategies among rape victims. *Journal of Counseling and Development, 72*, 633-639. https://doi.org/10.1002/j.1556-6676.1994.tb01694.x

Frazier, P., Conlon, A., & Glaser, T. (2001). Positive and negative life changes following sexual assault. *Journal of Consulting and Clinical Psychology, 69*, 1048–1055. https://doi.org/10.1037/0022-006x.69.6.1048

Galaal, K., Al Moundhri, M., Bryant, A., Lopes, A. D., & Lawrie, T. A. (2014). Adjuvant chemotherapy for advanced endometrial cancer. *Cochrane Database of Systematic Reviews*. doi:10.1002/14651858.cd010681.pub2

Ganz, P. A., Desmond, K. A., Leedham, B., Rowland, J. H., Meyerowitz, B. E., & Belin, T. R. (2002). Quality of life in long-term, disease-free survivors of breast cancer: a follow-up study. Journal of the National Cancer Institute, 94(1), 39-49.

Green, B. L., Rowland, J. H., Krupnick, J. L., Epstein, S. A., Stockton, P., Stern, N. M.Steakley, C. (1998). Prevalence of posttraumatic stress disorder (PTSD) in women with breast cancer. *Psychosomatics, 32*, 102–111. doi:10.1016/S0033-3182(98)71356-8

Greenbank, P. (2003). The role of values in educational research: The case for reflexivity. *British Educational Research Journal, 29*(6), 791-801. https://doi.org/10.1080/0141192032000137303

Grubaugh, A. L., & Resick, P. A. (2007). Posttraumatic growth in treatment seeking female assault victims. *Psychiatry Quarterly, 78*, 145-155. https://doi.org/10.1007/s11126-006-9034-7

Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough? *Field Methods*, *18*(1), 59-82. doi:10.1177/1525822x05279903

Gwynn, S. (2008). *Adult attachment and posttraumatic growth in sexual assault survivors* (Unpublished doctoral dissertation). University of North Texas, Denton, Texas.

Haddou Rahou, B., El Rhazi, K., Ouasmani, F., Nejjari, C., Bekkali, R., Montazeri, A., & Mesfioui, A. (2016). Quality of life in Arab women with breast cancer: a review of the literature. *Health and Quality of Life Outcomes*, *14*(1). doi:10.1186/s12955-016-0468-9

Hamdan, A. (2008). Cognitive Restructuring: An Islamic Perspective. *Journal of Muslim Mental Health,3,99-116.* Doi 10.1080/15564900802035268

Hams, J. I., Schoneman, S. W., & Carrera, S. R. (2005). Preferred prayer styles and anxiety control. *Journal of Religion and Health, 44*, 403-412. https://doi.org/10.1007/s10943-005-7179-6

Harandy, T. F., Ghofranipour, F., Montazeri, A., Anoosheh, M., Bazargan, M., Mohammadi, E., & Niknami, A. (2010). Muslim breast cancer survivor spirituality: Coping strategy or health seeking behavior hindrance? *Health Care Women International. 31*(1), *88-98.* https://doi.org/10.1080/07399330903104516

Harris, J. I., Erbes, C. R., Engdahl., B. E., Olson, R. H. A., Winskowski, A. M., & McMahill, J. (2008). Christian religious functioning and trauma outcomes. *Journal of Clinical Psychology, 64*, 17-29. https://doi.org/10.1002/jclp.20427

Hart, S. L., Vella, L., & Mohr, D. C. (2008). Relationships among depressive symptoms,

benefit-finding, optimism, and positive affect in multiple sclerosis patients after psychotherapy for depression. *Health Psychology*: *Office Journal of the Division of Health Psychology, 27*(2), 230-238. doi: 10.1037/0278-6133.27.2.230.

Hawthorne, D., Youngblut, J. M., & Brooten, D. (2011). Psychometric evaluation of the Spanish and English versions of the Spiritual Coping Strategies scale. *Journal of Nursing Measurement, 19*(1), 46-54. doi: 10.1891/1061-3749.19.1.46

Heath, E. M., Hall, B. J, Canetti, D., & Hobfoll, S. E. (2013) Exposure to political violence, psychological distress, re-source loss, and benefit findings as predictors of domestic violence among Palestinians. *Psychological Trauma: Theory, Research, Practice, and Policy. 5*, 366–376. https://doi.org/10.1037/a0028367

Hebert, R., Zdaniuk, B., Schulz, R., & Scheier, M. (2009). Positive and Negative Religious Coping and Well-Being in Women with Breast Cancer. *Journal of Palliative Medicine*, *12(6*), 537-545. doi:10.1089/jpm.2008.0250

Helgeson, V. S., Reynolds, K. A., & Tomich, P. L. (2006). A meta-analytic review of benefit finding and growth. *Journal of Consulting and Clinical Psychology*, *74*(5), 797-816. doi:10.1037/0022-006x.74.5.797

Herman, J. (1992). *Trauma and recovery the aftermath of violence–from domestic abuse to political terror.* New York, NY: Basic.

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist.* 52(12),1280–1300. https://doi.org/10.1093/acprof:oso/9780199765829.003.0010

Ho, S. M. Y., Chan, C. L. W., & Ho, R. T. H. (2004). Posttraumatic growth in Chinese cancer survivors. *Psycho-oncology, 13*, 377-389. https://doi.org/10.1002/pon.

Hobfoll, S. E., Hall, B. J., Canetti-Nisim, D., Galea, S., Johnson, R. J., & Palmieri, P. A. (2007). Refining our Understanding of Traumatic Growth in the Face of Terrorism: Moving from Meaning Cognitions to Doing what is Meaningful. *Applied Psychology*, *56*(3), 345-366. doi:10.1111/j.1464-0597.2007.00292.x

Horgan, O., Holcombe, C., & Salmon, P. (2010). Experiencing positive change after a diagnosis of breast cancer: a grounded theory analysis. *Psycho-Oncology*, *20*(10), 1116-1125. doi:10.1002/pon.1825

Howlader, N., Noone, A., Krapcho, M., Garshell, J., Neyman, N., Altekruse, S., Kosary, C., Yu, M., Cronin K.( 2013). SEER Cancer Statistics Review, 1975-2013.

Ibrahim A., Kira, S., Aboumediene, S., Ashby, L., Jamal, M., & Hala, A. (2013). The dynamics of posttraumatic growth across different trauma types in a Palestinian sample. *Journal of Loss and Trauma, 18,* 120–139. https://doi.org/10.1037/e637302012-001

Ismail, S. I., Soubani, M., Nimri, J. M., & Al-Zeer, A. H. (2013). Cancer incidence in Jordan from 1996 to 2009-a comprehensive study. *Asian Pacific Journal of Cancer Prevention, 14*(6), 3527-3534.

Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York, NY: Free Press.

Janoff-Bulman, R. (1999). Rebuilding shattered assumptions after traumatic life events: Coping process and outcomes. In C. R. Snyder (Ed.), Coping: The psychology of what works (pp. 305-323). New York: Oxford University Press.

Janoff-Bulman, R. (2004). Oman Cancer Association (OCA). Retrieved from http://www.bayups.com/portfolio/website/OCA/en/

Jassim, G. A., & Whitford, D. L. (2014). Quality of life of Bahraini women with breast cancer: A cross sectional study. *BMC Cancer,13*(1). doi: 10.1186/1471-2407-13-

Johnson, R. J. (2009). A prospective study of risk and resilience factors associated with posttraumatic stress symptoms and depression symptoms among Jews and Arabs exposed to repeated acts of terrorism in Israel. *Psychological Trauma: Theory, Research, Practice, and Policy, 1*, 291–311. https://doi.org/10.1037/a0017586

Jordan, H. (2000). *No such thing as a bad day.* Atlanta, GA: Longstreet Press.

Joseph, S. (2009). Growth following adversity: Positive psychological perspectives on posttraumatic growth. Psychological Topics, 18(2), 335-344.

Joseph, S., & Linley, P. A. (2008). *Trauma, recovery, and growth: Positive psychological perspectives on posttraumatic stress*. Hoboken, NJ: John Wiley & Sons.

Kagawa-Singer, M. (2011) Impact of culture on health outcomes. *Journal of Pediatric Hematology Oncology, 33*(Suppl 2), S90–S95. https://doi.org/10.1097/mph.0b013e318230dadb

Kallay E. (2007). Posttraumatic growth: A brief review. Available at: http://history-luj.ro/su/anuare/2007.

Karanci, A. N., & Erkam, A. (2007). Variables related to stress-related growth among Turkish breast cancer patients. *Stress and Health*, *23*(5), 315-322. doi:10.1002/smi.1154

Khaduri, R. A. (2007, September 6). Oman women past, present, and future. Retrieved May 4, 2014, from https://www.statecouncil.om/Kentico/Imported Files/English/highLights/6.aspx

Khalil, G. (1923). The prophet. Retrieved July 15, 2017, from http://thinkexist.com/quotation/the_deeper_that_sorrow_carves_into_your_being_the/339174.html

Kimhi, S., Eshel, Y., Zysberg, L., & Hantman, S. (2010). Postwar winners and losers in the long run: Determinants of war related stress symptoms and posttraumatic growth. *Community Mental Health Journal, 46*(1), 10-19. doi: 10.1007/s10597-009-9183-x

Kira, I., Lewandowski, L., Templin, T., Ramaswamy, V., Ozkan, B., & Mohanesh, J. (2008). Measuring cumulative trauma dose, types and profiles using a development-based taxonomy of trauma. *Traumatology, 14*, 62–87. https://doi.org/10.1177/1534765608319324

Kira, I., Templin, T., Lewandowski, L., Ramaswamy, V., Bulent, O., Abu-Mediene, S., . . . Alamia, H. (2011). Cumulative tertiary appraisal of traumatic events across cultures: Two studies. *Journal of Loss & Trauma, 16*, 43–66. https://doi.org/10.1037/e632962009-001

Kleim, B., & Ehlers, A. (2009). Evidence for a curvilinear relationship between posttraumatic growth and posttrauma depression and PTSD in assault survivors. *Journal of Traumatic Stress, 22*(1), 45-52. doi: 10.1002/jts.2037

Kleiman, S. (2004). Phenomenology: To wonder and search for meanings. *Nurse Researcher, 11*(4), 7-19.

Kucukkaya, P. G. (2010). An exploratory study of positive life changes in Turkish women diagnosed with breast cancer. *European Journal of Oncology Nursing*, *14*(2), 166-173. doi:10.1016/j.ejon.2009.10.002

Kumar, S., Burney, I. A., Al-Ajmi, A., & Al-Moundhri, M. S. (2011). Changing Trends of Breast Cancer Survival in Sultanate of Oman. *Journal of Oncology*, *2011*, 1-7. doi:10.1155/2011/316243

Kurian, A. & Carlson, R. (2010). Principles of Breast Cancer Therapy. Breast Cancer Epidemiology. Springer New York

Kvillemo P., & Bränström, R. (2014). Coping with breast cancer: A meta-analysis. *PLoS ONE, 9*(11), e112733. https://doi.org/10.1371/journal.pone.0112733

Laufer, A., & Solomon, A. (2006). Posttraumatic symptoms and posttraumatic growth among Israeli youth exposed to terror incidents. *Journal of Social and Clinical Psychology, 25*(4), 429-447. https://doi.org/10.1521/jscp.2006.25.4.429

Lawati, J., Kumar, S., Jaffe, A. (2008). Cancer Incidence in Oman. Eastern *Mediterranean Health Journal, 64(3),*1035-1041.

Leedy, P. D. & Ormrod, J. E. (2005). Practical research: Planning and design (8th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Lee, T. S., Kilbreath, S. L., Refshauge, K. M., Pendlebury, S. C., Beith, J. M., & Lee, M. J. (2007). Quality of life of women treated with radiotherapy for breast cancer. *Supportive Care in Cancer*, *16*(4), 399-405. doi:10.1007/s00520-007-0328-6

Lehman, J. M., Kilbourn, K. M., Boyers, A. E., Culver, J. L., Alferi, S. M., et al. (2001). Cognitive-behavioral stress management intervention decreases the prevalence of depression and enhances benefit finding among women under treatment for early-stage breast cancer. *Health Psychology, 20*(1), 20-32.

Lehto, U., Ojanen, M., & Kellokumpu-Lehtinen, P. (2005). Predictors of quality of life in newly diagnosed melanoma and breast cancer patients. *Annals of Oncology*, *16*(5), 805-816. doi:10.1093/annonc/mdi146

Lepore, S. J., & Revenson, T.A. (2006). Resilience and posttraumatic growth: Recovery, resistance, and reconfiguration. In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research and practice* (pp. 24-36). Mahwah, NJ: Lawrence Erlbaum Associates.

Lerner, M. J., & Gignac, M. A. (1992). Is it coping or is it growth? A cognitive-affective model of contentment in the elderly. In L. Montada, S. Filipp, & M. J. Lerner (Eds.), *Life crisis and experiences of loss in adulthood* (pp. 321-

337). Hillsdale, NJ: Lawrence Lazarus, R. S. (2006). *Emotion and adaptation*. New York, NY: Oxford University Press.

Lev-Wiesel, R., Amir, M., & Besser, A. (2005). Posttraumatic growth among female survivors of childhood sexual abuse in relation to the perpetrator identity. *Journal of Loss and Trauma, 10*(1), 7-17. https://doi.org/10.1080/15325020490890606

Levine, S. Z., Laufer, A., Stein, E., Hamama-Raz, Y., & Solomon, Z. (2009). Examining the relationship between resilience and posttraumatic growth. *Journal of Traumatic Stress, 22*(4), 282-286. https://doi.org/10.1002/jts.20409

Lewis, F. M., Cochrane, B. B., Fletcher, K. A., Zahlis, E. H., Shands, M. E., Gralow, J. R., & Schmitz, K. (2008). Helping her heal: A pilot study of an educational counseling intervention for spouses of women with breast cancer. *Psycho-Oncology, 17*(2), 131-137.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage

Lindstrom, C. M., Cann, A., Calhoun, L. G., & Tedeschi, R. G. (2013). The relationship of core belief challenge, rumination, disclosure, and sociocultural elements to posttraumatic growth. *Psychological Trauma, 5*(1), 50-55. doi:10.1037/a0022030

Linley, P. A., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress, 17*, 11–21. https://doi.org/10.1023/b:jots.0000014671.27856.7e

Lodhi, F., Ahmad, B., Shah, S., & Naeem, M. (2010). Determinants of Delayed Presentation in Breast Cancer. A.P.M.C, 4(1), 9–16. Retrieved from http://www.pmc.edu.pk/Downloads/apmc/apmc_v4n1/3- Determinants of

Loiselle, K. A., Devine, K. A., Reed-Knight, B., & Blount, R. L. (2011). Posttraumatic growth associated with a relative's serious illness. *Families, Systems, & Health, 29*(1), 64-72. doi: 10.1037/a0023043

Lopez, K. A. & Willis, D. G. (2004). Descriptive versus interpretive phenomenology: Their contributions to nursing knowledge. Qualitative Health Research, 14(5), 726-735.

Lundh, M. H., Lampic, C., Nordin, K., Ahlgren, J., Bergkvist, L., Lambe, M., Johansson, B. (2013). Changes in health-related quality of life by occupational status among women diagnosed with breast cancer-a population-based cohort study. *Psycho-Oncology*, n/a-n/a. doi:10.1002/pon.3285

Mahfouz, A., Hassanein, M., Nahar, S., Farheen, A., Gaballah, I., Mohamed, A., & Rabie, F., Aftab, R. (2013). Breast cancer knowledge and related behaviors among women in Abha City, Southwestern Saudi Arabia. *Journal of Cancer Education, 28*, 516-520. doi: 10.1007/s13187-013-0495-8

Manne, O., Winkel, G., & Fox, G. (2004). Posttraumatic growth after breast cancer: Patient, partner, and couple perspectives. *Psychosomatic Medicine, 66*(3),442-54. https://doi.org/10.1097/01.psy.0000127689.38525.7d

Markowitz, J. (2003). Positive affect predicts lower risk of AIDS mortality. *Psychosom Medicine, 65*(4), 620-6. https://doi.org/10.1097/01.psy.0000073873.74829.23

Martin, L.L., & Tesser, A. (1996). Some Ruminative Thoughts. In R.S. Wyer (Ed.), Ruminative thought: Advances in social cognition, 9 (pp. 1-47). Mahwah, NJ:

Lawrence Erlbaum Associates.

Martins da Silva, S. I., Moreira, H., & Canavarro, M. C. (2011). Growing After Breast Cancer: A Controlled Comparison Study with Healthy Women. *Journal of Loss and Trauma*, *16*(4), 323-340. doi:10.1080/15325024.2011.572039

McCullough, M E (1995) Prayer and health Conceptual issues, research review, and research agenda *Journal of Psychology and Theology, 19,* 15-29

McFarland, C., & Alvaro, C. (2000). The impact of motivation on temporal comparisons: Coping with traumatic events by perceiving personal growth. *Journal of Personality and Social Psychology, 79*(3), 327-343. https://doi.org/10.1037/0022-

McMillen, J. C. (1999). Better for It: How People Benefit from Adversity. *Social Work*, *44*(5), 455-468. doi:10.1093/sw/44.5.455

Mehrabi, E., Sepideh, H., Masoomeh, S., Mohammad, H., & Farid. (2015). Post-traumatic growth: A qualitative analysis of experiences regarding positive psychological changes among Iranian women with breast cancer. *Journal of Electronic physician, 12(4)*, 1239-1244

Michael, S. T., & Snyder, C. R. (2005). Getting Unstuck: The Roles of Hope, Finding Meaning, and Rumination in the Adjustment to Bereavement among College Students. *Death Studies*, *29*(5), 435-458. doi:10.1080/07481180590932544

Michael, S., & Esmat, A. (2011). Cultural perspectives in cancer care: Impact of Islamic traditions and practices in Middle Eastern countries. *Journal of Pediatric Hematology Oncology, 33*(2) S81-S86.

https://doi.org/10.1097/mph.0b013e318230dab6

Milan, E., Richardson, L., Marks, G., & Kemper, A. (2004). The roles of dispositional optimism and pessimism in HIV disease progression. *Psychology and Health. 167*(19), 167-181. https://doi.org/10.1080/08870440310001652696

Ministry of Health Oman (2014). National Response Strategy for HIV/AIDS in Oman, Communicable & Disease Survey,17(1), 1-6

Ministry of Health publication (2011). Ten-year cancer incidence among nationals of the GCC States 1990- 2010. Gulf Center for Cancer Control and Prevention, Sultan Qaboos University Hospital and Research Center.

Mohammed, A.J., Al-Lawati, N.A., Siyabi, N.H., Gharbi, (2008). Cancer incidence in Oman. Ministry of Health, Sultanate of Oman.

Mols, F., Vingerhoets, A. J., Coebergh, J. W., & Van de Poll-Franse, L. V. (2009). Well-being, posttraumatic growth and benefit finding in long-term breast cancer survivors. *Psychology & Health*, *24*(5), 583-595. doi:10.1080/08870440701671362

Montazeri, A., Gillis, C. R., & McEwen, J. (1996). Measuring quality of life in oncology: is it worthwhile? I. Meaning, purposes and controversies. *European Journal of Cancer Care*, *5*(3), 159-167. doi:10.1111/j.1365-2354.1996.tb00228.x

Montazeri, A., Vahdaninia, M., Harirchi, I., Ebrahimi, M., Khaleghi, F., & Jarvandi, S. (2008). Quality of life in patients with breast cancer before and

after diagnosis: an eighteen months' follow-up study. *BMC Cancer*, *8*(1). doi:10.1186/1471-2407-8-330

Moore, S. A., Varra, A. A., Michael, S. T., & Simpson, T. L. (2010). Stress-related growth, positive reframing, and emotional processing in the prediction of post-trauma functioning among veterans in mental health treatment. *Psychological Trauma: Theory, Research, Practice, and Policy, 2*(2), 93-96. doi: 10.1037/a0018975

Morris, B. A., & Shakespeare-Finch, J. (2011). Rumination, post- traumatic growth, and distress: Structural equation modelling with cancer survivors. *Psychooncology, 20*, 1176–1183. https://doi.org/10.1002/pon.1827

Moustakas, C. (1994). *Phenomenological research methods.* Thousand Oaks, CA: Sage.

Mundy, E. A., Blanchard, E. B., Cirenza, E., Gargiulo, J., Maloy, B., & Blanchard, C. G. (2000). Posttraumatic stress disorder in breast cancer patients following autologous bone marrow transplantation or conventional cancer treatments. *Behaviour Research and Therapy*, *38*(10), 1015-1027. https://doi.org/10.1016/s0005-7967(99)00144-8

Mystakidou, K., Tsilika, E., Parpa, E., Kyriakopoulos, D., Malamos, N., & Damigos, D. (2008). Personal growth and psychological distress in advanced breast cancer. *The Breast, 17,* 382-386. https://doi.org/10.1016/j.breast.2008.01.006

Nasr, S. H. (1989). The Qur'an as the foundation of Islamic spirituality. In S. H. Nasr (Ed.), *Islamic spirituality: Foundation* (pp. 3-10). New York, NY: SCM Press.

National Cancer Institute. Bethesda. Retrieved on 14/05/2017 from http://Seer.cancer.gov/csr/1975_2010/

Neimeyer, R. (2006). Re-storying loss: Fostering growth in the posttraumatic narrative. In L.G. Calhoun & R.G. Tedeschi (Eds.), *Handbook of posttraumatic growth* (pp. 68-80). Mahwah, NJ: Lawrence Erlbaum.

Nelson, C. (2009). Appreciating gratitude: Can gratitude be used as a psychological intervention to improve individual well-being? *Counseling Psychology Review, 24,* 38-50. Retrieved from http://www.bps.org.uk/publications/member-network-publications/member-publications/counselling-psychology-review.

Nelson, S. D. (2011). The posttraumatic growth path: An emerging model for the prevention and treatment of trauma-related behavioral health conditions. *Journal of Psychotherapy Integration, 21(1),* 1-42. doi: 10.1037/a0022908

Nelson, T. S., & Allred, D. D. (2005). Survey research in marriage and family therapy. In D. H. Sprenkle & F. P. Piercy (Eds)., *Research methods in family therapy* (pp. 211- 237). New York, NY: Guilford Press.

Pals, J. L., & McAdams, D. P. (2004). The transformed self: A narrative understanding of posttraumatic growth. Psychological Inquiry, 15(1), 65-69.

Pargament, K. I., & Sweeney, P. J. (2011). Building spiritual fitness in the Army: An innovative approach to a vital aspect of human development. *American Psychologist*, *66*(1), 58-64. doi:10.1037/a

Pargament, P. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific*

*Study of Religion, 37*, 710-724. https://doi.org/10.2307/1388152

Pargament, K. I., Desai, K. M., & McConnell, K. M. (2006) Spirituality: A pathway to posttraumatic growth or decline? In L. G. Calhoun & R. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research and practice* (121-137) London, England: Erlbaum.

Park, C. L. (2005). Religion and meaning. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 295-314). New York, NY: Guilford.

Park, C. L. (2010). Stress-Related Growth and Thriving Through Coping: The Roles of Personality and Cognitive Processes. *Journal of Social Issues*, *54*(2), 267-277. doi:10.1111/j.1540-4560. 1998.tb01218.x

Park, C., & Lechner, S. C (2006). Measurement issues in assessing growth following stressful life experiences. In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth* (pp. 47–67). Mahwah, NJ: Erlbaum.

Patton, M.W. (2002). Qualitative research & evaluation methods (3rd Ed.). Thousand Oaks, CA: Sage Publications.

Perihan, G. K. (2010). An exploratory study of positive life changes in Turkish women diagnosed with breast cancer. *European Journal of Oncology Nursing, 14*,166–173. https://doi.org/10.1016/j.ejon.2009.10.002

Prati, G., & Pietrantoni, L. (2009). Optimism, social support, and coping strategies as factors contributing to posttraumatic growth: A meta-analysis. *Journal of Loss and Trauma, 14*(5), 364-388. doi:10.1080/15325020902724271

Rajandram, R. K., Jenewein, J., McGrath, C., & Zwahlen, R. A. (2011). Coping processes relevant to posttraumatic growth: an evidence-based review. *Supportive Care in Cancer*, *19*(5), 583-589. doi:10.1007/s00520-011-1105-0

Ray, S. L. (2008). Evolution of posttraumatic stress disorder and future directions. *Archives of Psychiatric Nursing, 22*, 217-225. doi: 10.1016/j.apnu.2007.08.005

Richmond, J. M., Elliott, A. N., Pierce, T. W., Aspelmeier, J. E., & Alexander, A. A. (2009). Polyvictimization, childhood victimization, and psychological distress in college women. *Child Maltreatment, 14*, 127–147. https://doi.org/10.1177/1077559508326357

Roesch, S. C., Rowley, A. N. A., & Vaughn, A. A. (2004). On the dimensionality of the Stress-Related Growth Scale: One, three, or seven factors? *Journal of Personality Assessment, 82*, 281-290. doi: 10.1207/s15327752jpa8203_04

Sadler-Gerhardt, C. J., Reynolds, C. A., Britton, P. J., & Kruse, S. D. (2010). Women breast cancer survivors: Stories of change and meaning. *Journal of Mental Health Counseling, 32*(3), 265-282. https://doi.org/10.17744/mehc.32.3.q14777j84kx3285x

Sawyer, A., & Ayers, S. (2009). Post-traumatic growth in women after childbirth. *Psychology & Health, 24*(4), 457-471. doi: 10.1080/08870440701864520

Schensul, J. J., & LeCompte, M. D. (1999). *Analyzing & interpreting ethnographic data.* Lanham: AltaMira: A Division of Rowman & Littlefield.

Schilling, J. (2006). On the pragmatics of qualitative assessment: Designing the process for content analysis. *European Journal of Psychological Assessment, 22(1),* 28-37.

Schultz, J. M., Tallman, B. A., & Altmaier, E. M. (2010). Pathways to posttraumatic growth: The contributions of forgiveness and importance of religion and spirituality. *Psychology of Religion and Spirituality, 2*(2), 104-114. doi: 10/1037/a0018454

Schulz, U., & Mohamed, N. E. (2004). Turning the tide: Benefit finding after cancer surgery. *Social Science and Medicine, 59*, 653–662.

Schuster, M. A., Stein, B. D., Jaycox, L. H., Collins, R. L., Marshall, G. N., Elliott, M. N., Berry, S. H. (2001). A national survey of stress reactions after the September 11, 2001, terrorist attacks. *New England Journal of Medicine, 345*, 1507-1512. https://doi.org/10.1056/nejm200111153452024

Sears, S. R., Stanton, A. L., & Danoff-Burg, S. (2003). The yellow brick road and the emerald city: Benefit finding, positive reappraisal coping and posttraumatic growth in women with early-stage breast cancer. *Health Psychology*, *22*(5), 487-497. doi:10.1037/0278-6133.22.5.487

Shakespeare-Finch, J. (2013). Working with refugee survivors of torture and trauma: An opportunity for vicarious post-traumatic growth. *Counselling Psychology Quarterly, 26*(1), 89-105. http://dx.doi.org/10.1080/09515070.2012.727553

Sheikh, A. I. (2004). Theory and practice, posttraumatic growth in trauma survivors:

Siegel, K., & Schrimshaw, E. W. (2000). Perceiving benefits in adversity: Stress related

growth in women living with HIV/AIDS. *Social Science and Medicine, 51*, 1543-1554. https://doi.org/10.1016/s0277-9536(00)00144-1

Sikkema, K. J., Ranby, K. W., Meade, C. S., Hansen, N. B., Wilson, P. A., & Kochman, A. (2013). Reductions in traumatic stress following a coping intervention were mediated by decreases in avoidant coping for people living with HIV/AIDS and childhood sexual abuse. *Journal of Consulting and Clinical Psychology*, *81*(2), 274-283. doi:10.1037/a0030144

Silbermann, M., & Hassan, E. A. (2011). Cultural perspectives in cancer care: Impact of Islamic traditions and practices in Middle Eastern countries. *Journal of Pediatric Hematology Oncology, 33*, S81–S86. https://doi.org/10.1097/mph.0b013e318230dab6

Silva, S. M., Crespo, C., & Canavarro, M. C. (2012). Pathways for psychological adjustment in breast cancer: A longitudinal study on coping strategies and posttraumatic growth. *Psychology & Health*, *27*(11), 1323-1341. doi:10.1080/08870446.2012.676644

Simmen-Janevska, K., Brandstätter, V., & Maercker, A. (2012). The overlooked relationship between motivational abilities and posttraumatic stress: a review. *European Journal of Psychotraumatology*, *3*(1), 18560. doi:10.3402/ejpt.v3i0.18560

Simon, M. K. (2011). Dissertation and Scholarly research: Recipes for success (2011 Ed.). Seattle, WA, Dissertation Success, LLC.

Solomon, Z., & Dekel, R. (2007). Posttraumatic stress disorder and posttraumatic growth among Israeli ex-pows. *Journal of Traumatic Stress, 20(3*), 303-312.

Smith, J. A. & Osborn, M. (2003). Interpretive phenomenological analysis. In J. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (pp. 51-80). Thousand Oaks, CA: SAGE Publications Inc.

Sprenkle & F. P. Piercy (Eds)., Research methods in family therapy (2nd ed., 211-237). New York: Guilford Press.

Stanton, A.L., Bower, J.E., and Low, C.A. (2006) Posttraumatic Growth After Cancer. In L.G. Calhoun and R.G. Tedeschi (Eds.), *Posttraumatic Growth: Research and Practice,*138-174. New Jersey: Lawrence Erlbaum Associates, Inc.

Subandi, M. A., Achmad, T., Kurniati, H., & Febri, R. (2014) Spirituality, gratitude, hope and post-traumatic growth among the survivors of the 2010 eruption of Mount Merapi in Java, Indonesia. *Australasian Journal of Disaster and Trauma Studies, 18*(1). Retrieved from http://www.massey.ac.nz/~trauma/issues/2014-1/AJDTS_18-1_Subandi.pdf

Taku, K., Tedeschi, R. G., Cann, A., & Calhoun, L. G. (2009). The culture of disclosure: Effects of perceived reactions to disclosure on posttraumatic growth and distress in Japan. *Journal of Social and Clinical Psychology, 29*(10), 1226-1243. https://doi.org/10.1521/jscp.2009.28.10.1226

Tallman, B. A., Altmaier, E., & Garcia, C. (2007). Finding benefit from cancer. *Journal of Counseling Psychology*, *54*(4), 481-487. doi:10.1037/0022-0167.54.4.481

Taylor, S. E., Kemeny, M. E., Reed, G. M., Bower, J. E., & Gruenewald, T. L. (2000). Psychological resources, positive illusions, and health. *American Psychologist*, *55*(1), 99-109. doi:10.1037//0003-066x.55.1.93

Tedeschi, R. G., & Calhoun, L. G. (1995). Posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*, 455-471. https://doi.org/10.1007/bf02103658

Tedeschi, R. G., & Calhoun, L. G. (1996). Posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*, 455-471. https://doi.org/10.1007/bf02103658

Tedeschi, R. G., & Calhoun, L.G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychology Inquiry, 15*,1–18. https://doi.org/10.1207/s15327965pli1501_01

Tedeschi, R. G., & Calhoun, L. G. (1995). Posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*, 455-471. https://doi.org/10.1007/bf02103658

Tedeschi, R. G., Park, C. L., & Calhoun, L. G. (1998). Post traumatic growth: Conceptual issues. In I. B. Weiner, (Ed.), *Personality and Clinical Psychology Series*. (pp. 1-22). New Jersey: Lawrence Erlbaum.

Tedeschi, R. G., Park, C. L., & Calhoun, L. G. (2004). Posttraumatic growth: Positive changes in the aftermath crisis. Mahwah, NJ: Erlbaum.

Thompson, M. (2000). Life after rape: A chance to speak? *Sexual and Relationship Therapy, 15*, 325–343. https://doi.org/10.1080/713697439

Thouless, R. H. (958). *An introduction to the psychology of religion*. London, UK: Cambridge University Press.

Tokgoz, G., Yalug, I., Ozdemir, S., Yazici, A., Uygun, K., Aker, T. (2008). The prevalence of posttraumatic stress disorder and posttraumatic growth in patients with cancer. New Symposium, 46:51–61.

Urcuyo, K. R., Boyers, A. E., Carver, C. S., & Antoni, M. H. (2005). Finding benefit in breast cancer: Relations with personality, coping, and concurrent well-being. Psychology & Health, 20(2), 175-192. doi:10.1080/08870440512331317634

Webb, K. C. (2013). Effect of religiosity and combat exposure to predict combat service member posttraumatic growth (Unpublished doctoral dissertation). *George Fox University, Newberg.*

Weber, R. P. (1990). *Basic content analysis*. Newbury Park, CA: Sage Publication

Westphal, M., & Bonanno, G. A. (2007). Posttraumatic growth and resilience to trauma: Different sides of the coin or different coins? *Applied Psychology: An International Review, 56*(3), 417-427. doi: 10.1111/j.1464-0597.2007.00298.x

Wong-Kim, E., Sun, A., & Dematttos, M. C. (2003). Assessing cancer beliefs in a Chinese immigrant community. *Cancer Control, 10*(S5), 22-28.

Wong, L. P. (2008). Data Analysis in Qualitative Research: A Brief Guide to Using Nvivo. *Malaysia Family Physician, 3(1)*, 14-20

World Health Organization (2014) National Cancer Control Programs: Policies & Managerial Guidelines. *Bulletin of the World Health Organization*, 62:817–830

Wright, M. O., Crawford, E., & Sebastian, K. (2007). Positive Resolution of Childhood Sexual Abuse Experiences: The Role of Coping, Benefit-Finding and Meaning-Making. *Journal of Family Violence*, *22*(7), 597-608. doi:10.1007/s10896-007-9111-

Yang, D., Baumgartner, R. N., & Baumgartner, K. B. (2012). Posttraumatic growth and physical activity among Hispanic and Non-Hispanic White long-term breast cancer survivors. *American Journal of Epidemiology, 175*, 585. https://doi.org/10.1016/j.annepidem.2013.06.028

Zoellner, T., & Maercker, A. (2006). Posttraumatic growth in clinical psychology — A critical review and introduction of a two-component model. *Clinical Psychology Review*, *26*(5), 626-653. doi:10.1016/j.cpr.2006.01.008

# Appendix B: Interview Protocol

This interview is designed to gain an understanding of the lived experiences of Omani women following breast cancer and treatment. Specifically, I would like to explore your experiences of breast cancer diagnosis and to gain a better understanding of how post-traumatic growth may contribute to your healing and wellness in breast cancer. This interview will include exploration of the factors and processes that you as a survivor may believe influences any personal change. In addition, this interview is intended to explore your beliefs about the potential for positive growth to occur as a result of surviving cancer, and observations related to your growth as a person. There are no correct or incorrect answers to my questions, and all answers are welcome. I will be asking a series of questions related to various aspects of dealing with breast cancer diagnosis and treatment. These questions are meant to guide our conversation; however, please feel free to add any information that you feel is important for the research. At times, I might ask you to elaborate on an answer you have provided, or to clarify a point, to ensure that I accurately understand the meaning of your sentiments.

If at any time during this interview you begin to feel uncomfortable, please feel free to stop the interview, and we can discuss whether, or how, you wish to proceed. You have the right to discontinue the interview at any time and can choose to reschedule the interview for a later date or to withdraw from the study. Should you decide to discontinue your participation, I will provide you with the opportunity to debrief and discuss any concerns you may have. If there are questions that you do not wish to answer, you are under no obligation to do so and may indicate to me that you wish to pass on that

question. Information shared during this interview will remain confidential. Do you have any questions or concerns before we begin?

**A. Impact of Illness**

1- Would you share with me your experience with breast cancer?

2- What is meaning of breast cancer experience for you now?

**B. Coping**

1. What aspects of breast cancer were the most difficult to cope with? What do you attribute this difficulty to?
2. What aspects of breast cancer were the easiest to cope with? What do you attribute this to?
3. What other resources for support did you use to help you cope?

**C. Perceptions of Change**

1. In what ways if any, have you personally changed as a result of your experiences with breast cancer and its treatment?
2. Has your view of yourself changed because of your experiences with breast cancer? If yes, ask "Can you describe how it changed?"
3. Have your interactions with others changed in the way you relate to them if any?

4. In what ways, if any, have the goals, purposes, and priorities of your life changed after this experience?

5. Has your view of yourself changed because of your experiences with breast cancer? If yes, how it changed?

6. Has your philosophy of life changed as a result of having had breast cancer? If so, would you please describe this?

**D. Positive Growth**

1. How do you define positive growth?
2. Have you experienced positive growth since having breast cancer? Please describe your experience of this.
3. Have you identified any benefits from your breast cancer experience? Please describe the benefits, or lack thereof

**E. Indicators of Growth**

1. Do you see yourself as changed now compared to before your diagnosis with breast cancer?
2. Do you feel having breast cancer impacted your relationships with your loved ones and others? If so, please describe this.
3. Have any family members, friends, or other people commented on changes in your attitude or behavior that they noticed as a result of surviving breast cancer? If so, what have they said?
4. Have you experienced any new visions about life or living as a result of your experiences with breast cancer?

5. Is there anything else that we have not discussed that you would like to share with me or which you believe will help me to better understand your experiences with breast cancer?

Appendix C: Community Referrals

**Serenity of whispers Psychological Association**
Building number 3203, Way 3341
Al Khuwair, Muscat, Sultanate of Oman
Phone:2488321

**Sultan Qaboos University Hospital Behavioral department**
*Way* 447 C Al Mouj, Block *No* 304 C
ALMawelah, Muscat, Sultanate of Oman
Phone:2454987

**Harub Counseling and Medical Services**
Way No. 2830, House 2258، Al Kharijiyah Road، Sarooj
*Shatti* Al *Qurum*، Muscat, Oman
Phone:2490061

Appendix D: Flier

**Are You a Breast Cancer Survivor???**

**Interested in a research study?**


I am an Omani Physician and an online doctoral student at Walden University in USA. I am looking for Omani female breast cancer survivors to participate in a study related to possible posttraumatic growth after breast cancer and its treatment.

This study will involve completing one face to face confidential interview that may take 30—60minutes.

**Specifically looking for Omani women**:

With history of breast cancer

In remission between 2-3 years.

Currently off any cancer treatment

No other history of cancer

**If you qualify and would like to participate in this study, please contact the main reception of this organization/hospital. You can also contact me directly by calling the following numbers:**

**968-998-23152 OR 9682245756**

**Dr.Nashat Ali**

**Ministry of Health, Muscat, Oman**

Appendix E: E-mail to Counseling Community Clinics

**Serenity of whispers Psychological Association**
Building number 3203, Way 3341
Al Khuwair, Muscat, Sultanate of Oman
Phone:2488321

The Manager
Serenity of Whisper
Cc: Dr. Zahid

Dear Madam/Sir
Re: Research participants' referrals
I am conducting a qualitative research study as partial requirement of my Phd program on post traumatic growth in Omani women with breast cancer experience and treatment. Because the participants will be discussing their past experience of breast cancer, they may feel distressed while narrating their experience. For the wellbeing of participants, may I provide your clinic information to them if they decide to seek one session of free counseling following their participation in this research study?

Thanking you in advance,
Sincerely,
Dr. Nashat Shams
Ministry of Health, Oman

**Sultan Qaboos University Hospital Behavioral department**
*Way* 447 C Al Mouj, Block *No* 304 C
ALMawelah, Muscat, Sultanate of Oman

Dear Dr. Hameed
Re: Research participants' referrals
I am conducting a qualitative research study as partial requirement of my PhD program on post traumatic growth in Omani women with breast cancer experience and treatment. Because the participants will be discussing their past experience of breast cancer, they may feel distressed while narrating their experience. For the wellbeing of participants, may I provide your clinic information to them if they decide to seek one session of free counseling following their participation in this research study?

Thanking you in advance,
Sincerely,
Dr. Nashat Shams
Ministry of Health, Oman

**Harub Counseling and Medical Services**
Way No. 2830, House 2258، Al Kharijiyah Road، Sarooj
*Shatti* Al *Qurum*، Muscat, Oman

Dear Ayesha
Re: Research participants' referrals
I am conducting a qualitative research study as partial requirement of my Phd program on post traumatic growth in Omani women with breast cancer experience and treatment. Because the participants will be discussing their past experience of breast cancer, they may feel distressed while narrating their experience. For the wellbeing of participants, may I provide your clinic information to them if they decide to seek one session of free counseling following their participation in this research study?

Sincerely,
Dr. Nashat Shams
Ministry of Health, Oman

Appendix F: Permissions

**Subject: Referral to Serenity of Whisper**

**Date: September 6th, 2017**

**Dear Dr. Nashat**

Thank you for your trust in referring for psychological services. Your intention to refer your research participants to our clinic shows us that you are pleased with the services we provide. We're confident that your research clients will receive the best possible treatment in our professional and caring environment. We will provide one free post study counseling session. Please notify us by phone when you refer the client.

Best wishes as you pursue this research.

Sincerely,

Aamra Al Saidi, Case Manager, MSW, LCSW.

**Referral to Sultan Qaboos University Hospital Behavioral department**

**From: Dr. Hameed Wahaibi**

**To: Dr. Nashat Shams Ali**

**Date: September 3rd, 2017, 1:29 PM**

Dr. Nashat

Thankyou for considering me and my team for your research study clients. You are doing such a great work for the Omani society. It will be my pleasure always to help you in this research work. I will certainly be available to any of your study participants referred for psychotherapy services. The services will be free for your referrals.

Good luck with your project.

Sincerely,

Dr. Hameed, PhD

**Referral to Harub Counseling and Medical Services**

**From: Ayesha Alkhasbi**

**To: Dr. Nashat Shams Ali**

**Date: September 3rd, 2017**

Nashat,

Your topic sounds very interesting. I am happy to assist in counseling your sample population. Let me know ahead of time when you refer your client. What else do you need from me to help you in this study? We will provide one free post study counseling session.

Best wishes for your research,

Ayesha, MA.