### Eastern Kentucky University

# Encompass

**Psychology Doctoral Specialization Projects** 

Psychology

2021

# The Influence of Body Image on Intervention with Breast Cancer Patients

Jessica N. Cooling Eastern Kentucky University, jessica\_cooling@mymail.eku.edu

Follow this and additional works at: https://encompass.eku.edu/psych\_doctorals

Part of the Psychology Commons

#### **Recommended Citation**

Cooling, Jessica N., "The Influence of Body Image on Intervention with Breast Cancer Patients" (2021). *Psychology Doctoral Specialization Projects*. 12. https://encompass.eku.edu/psych\_doctorals/12

This Dissertation/Thesis is brought to you for free and open access by the Psychology at Encompass. It has been accepted for inclusion in Psychology Doctoral Specialization Projects by an authorized administrator of Encompass. For more information, please contact Linda.Sizemore@eku.edu.

## Running head: BREAST CANCER AND BODY IMAGE

## THE INFLUENCE OF BODY IMAGE ON INTERVENTION WITH BREAST CANCER

 $\mathbf{B}\mathbf{Y}$ 

## JESSICA N. COOLING, M.S.

## DOCTORAL SPECIALIZATION PROJECT APPROVED:

Chair, Advisory Committee

Member, Advisory Committee

Member, Advisory Committee

Member, Advisory Committee

Dean, Graduate School

## STATEMENT OF PERMISSION TO USE

In presenting this doctoral specialization project in partial fulfillment of the requirements for a Doctorate of Psychology degree at Eastern Kentucky University, I agree that the Library shall make it available to borrowers under rules of the Library. Brief quotations from this document are allowable without special permission, provided that accurate acknowledgements of the source are made. Permission for extensive quotation from or reproduction of this document may be granted by my major professor. In [his/her] absence, by the Head of Interlibrary Services when, in the opinion of either, the proposed use of the material is for scholarly purposes. Any copying or use of the material in this document for financial gain shall not be allowed without my written permission.

Signature:

Junifloorly

Date: 06/02/2021

The Influence of Body Image on Intervention with Breast Cancer Patients

By

Jessica Cooling

Submitted to the Faculty of the Graduate School of

Eastern Kentucky University

In partial fulfillment of the requirements for the degree of

DOCTORATE OF PSYCHOLOGY

© Copyright 2020 by JESSICA COOLING All rights reserved

#### Acknowledgements

I would first and foremost like to thank my family for always encouraging my goals. You have always pushed me to do my best, and I could not have made it this far without your unconditional support. To my mom, this topic would have never crossed my mind had it not been for your experience with breast cancer during my time in this program. Your strength and reliance on God through such a difficult time in your life was inspiring, and because of your strength, I am glad to be able to share your story and learn more about how I can help other women who are in your position. To my dad, our daily talks throughout this entire program have kept me sane. And to my husband, Josh, your strength, selflessness, and patience throughout this process has not gone unnoticed. Thank you for your unfailing support and understanding during this period of life.

I would also like to thank the faculty of the Psychology Department at Eastern Kentucky University, whose expertise and supervision have guided me throughout this doctoral program. I owe a special thank you to Dr. Melinda Moore, Dr. Michael McClellan, and Dr. Dustin Wygant for your invaluable time and expertise as members of my committee. Lastly, I am extremely grateful for my cohort. I have been blessed to work with a strong, intelligent, and unique group of women. I could not imagine having spent the last several years with any other group of people. Thanks to each and every one of you who was always there to lend a helping hand, to provide insight, or to simply be a friend.

#### Abstract

Body image poses a significant issue for breast cancer patients and survivors. While a wide array of research has been done examining the effect of breast cancer diagnosis and treatment on body image, little research has focused on creating interventions specifically for body image among this population. This paper reviews the literature that shows how breast cancer can affect a woman's body image, including several cultural considerations as body image ideals vary between cultures. Furthermore, the literature shows breast cancer affects young women (typically defined as aged 35 years or less) differently than it does middle-aged and older women. Thus, there is a section regarding young women's unique treatment needs and presenting issues. There is a brief discussion about assessing body image among breast cancer patients, as the Body Image Scale (BIS) was the most frequently used measure in the literature. Lastly, this author reviews several interventions that have been done to treat body image among breast cancer patients and survivors and makes suggestions for future directions of treatment.

# Table of Contents

Section I: Introduction	1
Statement of Problem	1
Significance of Issue	1
Purpose	2
Section II: Literature Review	4
Effects of Breast Cancer on Body Image	4
The Influence of Timing and Stage of Reconstruction	8
Risk Factors for Breast Cancer and Effects on Sexuality	13
Psychological Adjustment	17
Special Considerations for Metastatic Breast Cancer	19
Young Women	21
Cultural Considerations	25
South African Culture	25
Traditional Chinese Culture	26
Latina Survivors	27
Greek Culture	29
Qualitative Research/Interviews with Breast Cancer Survivors	30
Qualitative Studies	30
Interviews with Cancer Treatment Center of America (CTCA) Staff Members	38
Interview with Author's Mother	41
Assessment of Body Image in Breast Cancer Patients	45
Intervention on Body Image with Breast Cancer Patients	46
Proposed Frameworks	46
Self-compassion and Mindfulness	50

Breast Cancer as a Trauma	56
Partner Empathy and Support	59
A Sexual Life Reframing Program	63
The Role of Religion in Intervention	66
Meta-analyses and Cognitive Behavioral Therapy Techniques	67
Section III: Conclusions	72
References	76
Appendix: Resources and Summary Lists	84

#### Introduction

#### **Statement of Problem**

Body image, most popularly defined as a multifaceted concept that involves thoughts, emotions, perceptions, and behavior regarding one's appearance and physical functioning, is a complex issue (Teo et al., 2016). Although the concept has been around for many years and has been widely studied in the general population, research and treatment of body image within a population of individuals who have had cancer is less comprehensive. Specifically, there is a limited amount of literature on body image concerns among breast cancer patients and survivors. As will be demonstrated in this paper, there has been research on how breast cancer diagnosis and treatment affects a woman's body image, but very few studies discussed interventions specifically targeted at body image for women with breast cancer. Consequently, there appears to be a lack of available interventions for women with breast cancer presenting with concerns about their body image.

#### **Significance of Issue**

Despite the lack of interventions available for body image concerns among women with breast cancer, the literature points to the significance of body image as an issue among breast cancer patients and survivors. As will be discussed in the literature review, breast cancer diagnosis and treatment appears to have a significant negative effect on women's body image during, immediately after, and in some cases, years following treatment completion. Both quantitative and qualitative research has shown the impact of breast cancer on a woman's body image, which points to the need for interventions targeting such concerns.

Furthermore, this issue poses a significant issue for the author of this paper as well. During my second year of the graduate program, my mother was diagnosed with breast cancer.

Through my mother's experience with the doctors, oncology team, and surgeons, I was able to gain insight into the process firsthand. Although I was not thinking of researching breast cancer for my doctoral specialty project at that time, this past summer marked 2 years of survivorship for my mother. Although she has been cancer free for 2 years, she still has lingering effects from the cancer treatment and has discussed remaining body image concerns with me. Furthermore, she visited the Cancer Treatment Center of America in Philadelphia, PA this summer and sat in on a training with the psychiatrist, who discussed body image in her talk. Moreover, at her two-year follow-up appointment with her breast surgeon, she was discussing how I was planning to research intervention with breast cancer patients for my doctoral project. The surgeon suggested I look into body image, as it is currently the "hot topic" in cancer research recently. Therefore, I believe that I am working on a current, significant issue that needs to be addressed. At the same time, I think that I am creating a piece of work that honors my mother and her experience and survivorship.

#### Purpose

The purpose of this paper is to create a comprehensive review of the literature on breast cancer patients. While much of this paper will apply to mental health professionals, there are aspects that may be useful to other health professionals as well. For example, some sections of the paper discuss the importance of patient-centered communication and the role of an informative physician in breast cancer treatment. However, the majority of the paper discusses how breast cancer diagnosis and treatment affects a woman's body image. Then, the author shifts to discussing interventions that target body image with breast cancer patients and survivors, what aspects of treatment have been the most useful, and future directions intervention may go. Interviews from research and from this author's personal experience are also included to provide

insight into several women's experience with breast cancer, highlighting the importance of body image as a standard part of treatment. Such an inclusive piece of work may be a useful resource to which professionals can turn to for information regarding breast cancer patients' mental health, particularly concerning body image.

#### **Literature Review**

#### Effects of Breast Cancer on Body Image

Breast cancer treatment often involves several interventions over an extended duration (Przezdziecki et al., 2013). This typically includes an initial surgery (such as mastectomy or lumpectomy) followed by additional therapy (Przezdziecki et al., 2013). Such additional therapy may include chemotherapy, radiation therapy, hormonal treatments, or a combination of the three (Przezdziecki et al., 2013). These treatments alone, and in combination, can produce a number of different side effects, particularly in regard to body-image specific outcomes (Przezdziecki et al., 2013). As breast surgery, whether a full mastectomy or lumpectomy, may result in breast asymmetry, scarring, alteration in nipple sensation, need for breast prosthesis, or lymphedema, it is not surprising breast cancer patients and survivors may experience psychological distress, particularly in relation to the individual's perception of her physical appearance (Przezdziecki et al., 2013). Furthermore, chemotherapy presents challenges and changes such as hair loss, weight fluctuation, skin and fingernail discoloration, or hot flashes (Przezdziecki et al., 2013). Radiation treatment may also be given alone or in combination with chemotherapy, which may further cause skin reactions and potential slow progressing long-term neurological challenges (Przezdziecki et al., 2013). Some women even undergo a chemoprevention program, which may cause treatment-induced weight gain and hot flashes (Przezdziecki et al., 2013). Helms et al. (2008) also cite that women in general are concerned with their appearance, weight, and body, and "such premorbid concerns can contribute to psychological distress in women treated for breast cancer" (p. 313). Therefore, it is not difficult to see how a plethora of bodily changes occur throughout the treatment of breast cancer. Moreover, these bodily changes are not within the individuals' domain to control; they have no control over the extent and severity of the impact of treatment. It may seem that it is a matter of choice. Does the individual opt for less

treatment in hopes of sparing their body image and mental health? Or do they fight for the best treatment possible, choosing to endure any adverse effects of treatment so they can be medically well? When given these two options, it does not appear to be much of a choice at all.

Przezdziecki et al. (2013) define body image as reflecting "a direct personal perception and self-appraisal of one's physical appearance, whereby negative thoughts and feeling related to one's body indicate disturbance of body image and lead to dissatisfaction with oneself" (p. 1872). For some, a high personal investment in one's body image can act as a source of selfworth, and as women typically already have a tendency to focus on body image-related evaluation, a diagnosis of breast cancer may further exacerbate this tendency as previous research has shown the loss of a breast is inherently linked to a woman's identity, sexuality, and sense of self (Przezdziecki et al., 2013). Helms et al. (2008) reinforce this notion, citing research that has demonstrated how women are more likely to have difficulty adjusting to breast cancer and the subsequent bodily changes if they place greater importance on body image and appearance. Indeed, Przezdziecki et al. (2013) also cite previous research showing approximately one-third of breast cancer survivors express distress related to body image disturbance, even after successful cancer treatment. This is particularly true for younger women, as will be discussed in a separate section due to their unique experience with breast cancer. Additionally, Helms et al. (2008) note that weight gain occurs among approximately 80% of women with breast cancer as a side effect related to chemotherapy, increased caloric intake, or changes in physical activity. Such weight gain may have a negative impact on a woman's self-esteem and quality of life, and previous studies have found weight gain to distress and adversely affect survival for women with breast cancer (Helms et al., 2008).

Przezdziecki et al. (2013) discuss two models that have been applied to understanding the development of body image distress following cancer treatment. Przezdziecki et al. (2013) discuss a model proposed by Fox and Corbin (1989), who asserted that physical self-worth can be divided into four domains: body attractiveness, physical strength, physical conditioning, and physical competence. While the purpose of Fox and Corbin's (1989) study was to develop an instrument that would allow application of advances in self-esteem theory to the study of physical self-perception, it is applicable to breast cancer patients as all of the domains mentioned can be affected by breast cancer and its treatment

Przezdziecki et al. (2013) also cite research by Higgins (1987) that describes a selfdiscrepancy theory, which suggests a person's self-concept is a relationship between the actual and ideal-state representations. Higgins (1987) propose that different types of self-discrepancies represent different types of negative psychological situations associated with various types of discomfort, such as fear, threat, disappointment, or sadness. Therefore, when an individual undergoes breast cancer treatment, the discrepancy between how they would like to appear versus how they actually are can increase, and a prolonged state of high discrepancy may manifest as ongoing tension or distress (Przezdziecki et al., 2013).

However, Przezdziecki et al. (2013) focused on self-compassion, or the ability to "kindly accept oneself or show self-directed kindness while suffering." They describe it as an internal resource that women may use to cope with the changes occurring in their bodies following a cancer diagnosis. As a rapid alteration in body image is likely to test a woman's ability to cope with multiple losses and physical changes, women with higher levels of compassion towards herself may be more likely to have the capacity to deal with self-blame or self-criticism. Although not studied in breast cancer patients, previous research has shown self-directed

compassion helps decrease frequency and automaticity of negative thoughts about appearance. Thus, Przezdziecki et al. (2013) speculate that evidence for a self-compassion-body image link is emerging.

Przezdziecki et al. (2013) aimed to investigate the relationship between body image disturbance, self-compassion, and psychological distress. They further aimed to determine whether body image difficulties would be associated with more distress through low selfcompassion particularly among women who have survived breast cancer. The authors hypothesized an increased disturbance in body image and low self-compassion would be associated with increased psychological distress, as well as predicted that self-compassion would mediate the body image disturbance and psychological distress relationship. Indeed, Przezdziecki et al. (2013) found that distress was associated with greater body image disturbance, lower levels of self-compassion, less comfort with weight, and greater perceived pressure from others. Furthermore, many of the women who reported disturbance in their body image, specifically related to their breast cancer diagnosis and treatment, reported sustained body image difficulties both at and beyond the 1 year mark post-diagnosis. Therefore, such ongoing difficulties suggest these women's needs are not being adequately addressed, but the Przezdziecki et al. (2013) study provides hope for changing this. Przezdziecki et al. (2013) found that women experiencing greater self-compassion experienced lower distress, the authors argue that a woman's selfcompassion may need to be reinforced or enhanced to lessen the impact of body image disturbance, with those in poorer physical health or other challenges to well-being requiring higher levels of self-compassion. Thus, Przezdziecki et al. (2013) believe self-compassion is a crucial factor of intervention in addressing body image with breast cancer patients, and

enhancement of one's self-compassion should be included in an effective body image intervention.

#### The Influence of Timing and Stage of Reconstruction

Due to the bodily changes a woman endures through breast cancer treatment, breast reconstruction is considered a standard part of care for breast cancer patients who have undergone a mastectomy, at least in the United States (Teo et al., 2016). Indeed, D'Souza et al. (2011) assert that "post-mastectomy breast reconstruction is essential to restore body image and improve quality of life" (p. 1). Reconstruction may be unilateral or bilateral, but both involve rebuilding a woman's breasts using autologous tissues, implants, or a combination of both (Teo et al., 2016). More specifically, reconstruction for a unilateral mastectomy may include rebuilding the breast mound, areola, and nipple to match the other breast, whereas bilateral mastectomy reconstruction would involve recreating both breasts (Teo et al., 2016). While such restoration is intended to facilitate psychosocial adjustment, including enhancing body image and quality of life, the entire process can take months or even years to complete (Teo et al., 2016). As the length of the reconstruction process is usually multi-staged, it also often depends on many patient-related and treatment-related factors such as financial reasons or undergoing chemotherapy at the time (Teo et al., 2016). Thus, Teo et al. (2016) argue that a better understanding of body image and quality of life in breast cancer patients undergoing reconstruction is necessary in order to advance psychosocial care for the patients.

Teo et al. (2016) define body image as reflecting a multifaceted concept that involves thoughts, emotions, perceptions, and behavior regarding one's appearance and physical functioning. They also discuss body image satisfaction, which "encompasses feelings of attractiveness and contentment with one's body," which has been shown in other research to be

negatively affected by the physical changes in appearance that accompany breast cancer treatment (Teo et al., 2016, p. 1106). To go a step further, they also discuss the relationship between body image satisfaction and quality of life (a concept comprised of physical, functional, social, and emotional well-being), noting that body image satisfaction is positively related to quality of life in patients with breast cancer (Teo et al., 2016). While the treatment of breast cancer can cause many physical changes and potentially decrease body image satisfaction in itself, there are other factors that may influence patients' quality of life and body image satisfaction (Teo et al., 2016). For example, patient characteristics such as age or body mass index, treatments such as chemotherapy and radiation therapy, and type of reconstruction may all influence the patient's quality of life (Teo et al., 2016).

In the study by Teo et al. (2016), the authors investigated how the timing and stage of reconstruction, both separately and interactively, would influence body image and quality of life in breast cancer patients. In terms of timing, reconstruction can either be immediate or delayed (Teo et al., 2016). If reconstruction is immediate, the process begins at the time of the mastectomy (Teo et al., 2016). If the reconstruction is delayed, it does not begin until months or even years after the mastectomy (Teo et al., 2016). While previous studies have examined breast reconstruction timing and psychosocial outcomes, Teo et al. (2016)'s study was unique in that the authors proposed to measure the reconstruction process by stage rather than by time. That is, rather than measuring the process by months or years, they broke the process down into four different stages: pre-reconstruction, completed stage one, completed stage two, and final stages (Teo et al., 2016). If an individual was in the pre-reconstruction stage, it meant they had not had any previous reconstruction (cancer-related) and were about to undergo initial reconstructive surgery (Teo et al., 2016). If participants had completed stage one, it meant they had undergone

initial reconstruction such as the placement of a tissue expander, autologous flap, or implant (Teo et al., 2016). If participants had completed stage two, they had a tissue expander exchanged for an implant or autologous flap (only individuals who had a tissue expander at stage one had to do undergo the exchange surgery) (Teo et al., 2016). Finally, those who were in the final stages were getting surgical revision to improve aesthetic outcomes such as revision of shape or nipple reconstruction (Teo et al., 2016). Indeed, Didier et al. (2008) found that nipple areolar complex (NAC) sparing following a mastectomy had a positive impact on patient satisfaction, body image, and psychological adjustment. Didier et al. (2008) also found that most women who preserved their nipple who have preferred to keep it, while most women who preserved their nipple expressed a high level of satisfaction for doing so. Thus, even the final stages of reconstruction may influence a woman's body image and should be considered, as Teo et al. (2016) assert.

Through their study, Teo et al. (2016) found that timing and stage of reconstruction predicted body image dissatisfaction and quality of life, even when controlling for patient-related and treatment-related factors such as age and reconstruction type. More specifically, the interaction between timing and stage of reconstruction was found to significantly predict body image dissatisfaction and social well-being (Teo et al., 2016). However, only the stage of reconstruction was found to significantly predict emotional well-being (Teo et al., 2016). Furthermore, body image dissatisfaction was significantly different between groups who had undergone immediate versus delayed reconstruction, with the most prominent difference in the pre-reconstruction stage (Teo et al., 2016). For example, those who were preparing to undergo delayed reconstruction reported significantly higher body dissatisfaction compared with those about to undergo immediate reconstruction (Teo et al., 2016).

In light of the results Teo et al. (2016) found, it is important for clinicians to recognize that patients waiting for a delayed mastectomy may be inclined to prolonged body image distress, as the delayed group in this study waited an average of 3 years to undergo reconstruction. Therefore, Teo et al. (2016) suggest patients waiting to undergo delayed reconstruction may benefit from psychological interventions designed to target body image distress, such as body image therapy. Moreover, such interventions may be particularly important for patients who wished to have immediate reconstruction but could not due to other factors, such as their treatment plan (i.e., radiation therapy) or patient-related factors (i.e., obesity, smoking status) (Teo et al., 2016).

Although Teo et al. (2016) found that patients waiting for delayed reconstruction had the highest body image dissatisfaction while in the pre-reconstruction stage, those who had immediate reconstruction showed increased body dissatisfaction in the later stages. The authors speculate that it may be patients who had immediate reconstruction had higher expectations of the outcome, and previous research has shown that the patient's expectations prior to surgery are important in predicting patient outcomes. Thus, Teo et al. (2016) assert that patient education is important in encouraging more realistic expectations. Furthermore, important findings regarding overall quality of life were found. Just as body image dissatisfaction was found to be higher in those waiting delayed reconstruction, while they were in the pre-reconstruction stage, social well-being was also lower for these patients compared to those waiting immediate reconstruction (Teo et al., 2016). Moreover, delayed reconstruction was associated with lower levels of perceived social support. However, perceived support from family members, friends, and one's spouse increased once the reconstruction process was initiated, which Teo et al. (2016) stated reflects previous literature that suggests social support is greatest at the time of a stressful event.

However, due to the lack of perceived support during the waiting period, there is a need for appropriate psychosocial support between the mastectomy and the start of the reconstruction process (Teo et al., 2016). Therefore, overall, the findings of this study highlight the need for targeted interventions to improve body image and quality of life for breast cancer patients during the various stages of treatment.

In relation to breast reconstruction and mastectomy, Lindwall and Bergbom (2009) assert that the changed image of a woman's body may mean she no longer feels whole. Even if the breast(s) can be reconstructed, her body is forever changed. Although reconstruction is meant to assist the woman in adjusting to her new body, surgical outcomes can lead to undesirable outcomes at times (Lindwall & Bergbom, 2009). For example, the breasts may be asymmetrical, the woman may or may not undergo nipple reconstruction, or the outcome may simply not meet her expectations. In a study by Teo et al. (2017), vertical asymmetry was indeed found to be significantly associated with body image dissatisfaction. Furthermore, some abilities and mobility may change following surgery (Lindwall & Bergbom, 2009). As the chest area and pectoralis muscles control many upper body movements, a woman may suffer from a lot of soreness and pain just after the surgery. When this author's mother had a mastectomy, she was extremely limited in her mobility for some time. She was unable to put a shirt on by herself unless it buttoned up the front, could not reach her arms behind her, and had to be very careful not to strain her chest muscles. She was also an extremely active woman prior to her surgery, so she wanted to get back into physical activity as soon as she was able. While she was able to go on walks shortly after her mastectomy, she was tentative to lift weights or even run. One exercise in particular was very daunting to her: a push-up. It took her nearly two years to even attempt to do a push-up. Thus, mobility can be affected for quite some time following surgery.

Additionally, there may be permanent scarring. If a woman views her breasts as part of the image of an ideal woman, such scarring and the removal of the breasts can affect her body image, as has been discussed (Lindwall & Bergbom, 2009).

#### Risk Factors for Breast Cancer and Effects on Sexuality

Breast cancer, and the treatment of breast cancer, can clearly cause bodily changes that may put survivors at risk for poorer body image (Fazzino et al., 2017). Such bodily changes may include alterations in appearance, sensory changes, and functional impairment. For example, physical alterations may include scarring and the removal of one or both breasts, sensory changes may include pain and numbness, and functional impairment may include dysphagia (difficulty swallowing) or dysarthria (slurred or slowed speech) (Fazzino et al., 2017).

Although the degree and type of changes that occur in an individual depend on the characteristics of their disease (i.e., tumor histology, stage, and type of treatment received), it is widely recognized that mastectomy and reconstruction surgeries result in poorer body image compared to breast conserving surgeries (Fazzino et al., 2017). In addition to the physical scarring and loss of breast(s), other side effects from treatment may include hair loss, changes to sexuality and sexual functioning, changes in body composition, weight gain, or treatment-induced menopause (Fazzino et al., 2017). According to (Fazzino et al. 2017), as many as 70% of survivors have been found to indicate body dissatisfaction following treatment. Furthermore, Fazzino et al. (2017) cited how body image among breast cancer survivors generally decreases in the first 6 months after treatment, at which point it often stabilizes (even if at a lower level). Therefore, body image is an important concept to examine with breast cancer survivors as it can impact their quality of life and physical rehabilitation. Not only can breast cancer treatment lead to poor body image, poor body image has been associated with increased depression and

emotional distress, poorer psychosocial functioning, and lower quality of life (Fazzino et al. 2017). Indeed, Chen, Liao, Chen, Chan, and Chen (2012) reinforced these findings in their own study, which showed negative body image may reduce patients' ability to cope with breast cancer after surgery. Additionally, Chen et al. (2012) found mastectomy and younger age were related to body image concerns, as has been cited previously (see Moreira et al., 2010 and Rosenberg et al., 2013). Furthermore, women participating in physical therapy rehabilitation following treatment showed less improvement in functioning if they had a poor body image (Fazzino et al., 2017).

As mentioned, weight gain during or following breast cancer treatment is common, and as many as 68-71% of breast cancer patients are overweight or obese at diagnosis (Fazzino et al., 2017). Moreover, 50-80% of patients gain weight during treatment (Fazzino et al., 2017). For patients who are obese at the time of diagnosis, there are higher surgery complication rates as well as a higher risk for poor body image following treatment (Fazzino et al., 2017).

In assessing body image among breast cancer patients, many studies focus on overall body image rather than exploring dimensions of body image (Collins et al., 2011; Falk Dahl et al., 2010; Fobair et al., 2006; Raggio et al., 2014; Rosenberg et al., 2013). For example, Fazzino et al. (2017) describe body image as a multi-dimensional construct that is composed of thoughts, feelings, and behaviors. However, they posit that body image includes unique dimensions among breast cancer survivors, including domains such as the loss of femininity and avoidance of activities due to embarrassment from treatment side effects (Fazzino et al., 2017). Thus, the Body Image and Relationships Scale (BIRS; Hormes et al., 2008) was developed for female breast cancer survivors; it produces an overall body image score as well as dimensional scores.

Thus, the purpose of Fazzino et al.'s (2017) study was to evaluate the effects of weight gain since diagnosis, largest weight fluctuation in adulthood, and current body mass index on breast cancer-specific body image constructions, specifically among overweight/obese breast cancer survivors. Fazzino et al. (2017) found that a larger weight fluctuation in adulthood was associated with poorer overall body image and three socially related body image dimensions (social activity restriction, embarrassment about appearance, and sexuality). Interestingly, among overweight/obese survivors, weight gain during treatment was not as important to breast cancerspecific body image as was the largest weight fluctuation in adulthood (Fazzino et al., 2017). Fazzino et al. (2017) speculate that pre-existing body image concerns from prior weight gain may predispose women to body image concerns following breast cancer treatment. Regarding these results, it is important to examine weight fluctuation history in accordance with current body mass index, as it may predispose women to more body image concerns following breast cancer treatment. Furthermore, women who are overweight/obese often have a history of negative social interactions or negative feelings related to sexual attractiveness due to their weight, which Fazzino et al. (2017) speculate may actually make them more resilient when dealing with negative treatment effects. On the other hand, Fazzino et al. (2017) also discuss how these women may actually already restrict their social activities due to body concerns; thus, the effects of the cancer may not have exacerbated their perceptions. Nevertheless, even if their concerns did not become significantly worse, overweight/obese women in this study reported substantially worse body image in comparison to the general population (Fazzino et al., 2017). Thus, their study again highlights the significance of identifying factors and traits that increase a woman's risk for poor body image during and following breast cancer treatment. Furthermore, the results highlight that body image is an issue for survivors, and it needs to be addressed as an

important target of psychological intervention. With the information this study provided, it is possible to identify women who may be at particular risk for poor body image, which can inform mental health professionals about the potential focus of prevention and intervention efforts (Fazzino et al., 2017).

Not only is breast cancer the most common type of cancer among women, it is the second most common type of cancer overall (de Morais, Freitas-Junior, Rahal, & Gonzaga, 2016). As the range of negative symptoms breast cancer patients may experience varies widely, treatment often involves a multidisciplinary team. However, de Morais et al. (2016) again reinforce how body image can be particularly concerning among breast cancer patients, and this affected body image can influence their sexuality and level of intimacy with a partner as well.

Interestingly, de Morais et al. (2016) note that communication is often poor between health care professionals and their patients. Each person may expect the other to bring up the subject of sexuality or changing body image, but it may never be brought up. Thus, women may feel a lack of education and understanding of the potential consequences from breast cancer. The takeaway point from de Morais et al. (2016) is the need for improvement in communication between doctors/clinicians and the patient. Including regular questions about body image and sexual life should be included as part of a brief assessment in sessions, as the patient may otherwise be too uncomfortable to bring it up on their own (de Morais et al., 2016). However, when directly questioned, they may be more willing to open up about any concerns they have. Creating an open environment in which patients can express their concerns is recommended to be a standard part of intervention with breast cancer patients.

#### **Psychological Adjustment**

It is important to consider that breast cancer is highly individualized (Brandão et al., 2015). It is a very broad diagnosis with many specific types of cancer within the overall domain. Moreover, Brandão et al. (2015) point out the ways in which women respond and adapt to breast cancer varies widely. While some women detect their cancer early and have a mastectomy with no chemotherapy or radiation therapy, others do not receive a diagnosis of breast cancer until it is in the advanced stages, and treatment is much more intensive. Nonetheless, the authors conceptualize cancer as a chronic disease that is likely to affect patients throughout their lifetime in some manner, which indicates the importance of addressing factors that can help patients thrive in life after cancer (Brandão et al., 2015). In discussing what psychological adjustment means, Brandão et al. (2015) define both the traditional and a more holistic view on the term. Traditionally speaking, psychosocial adjustment was described as merely the absence of a psychological disorder (Brandão et al., 2015). However, a more holistic approach has surfaced, with authors arguing adjustment should include cognitive, emotional, behavioral, and psychological domains as well as how patients manage the medical and physical challenges of their disease (Brandão et al., 2015). Nevertheless, the most commonly studied areas of adjustment have been anxiety and depression (Brandão et al., 2015).

Additionally, Brandão et al. (2015) discuss how the timing and stage of disease influence adjustment among breast cancer patients, which reinforces Teo et al.'s (2016) findings. For example, while many studies have focused on short-term coping skills at the time of diagnosis and immediately after treatment, Brandão et al. (2015) argue that challenges extend well beyond the short-term. Therefore, research has begun to focus more on the lasting effects of breast cancer and long-term psychological adjustment, but work still needs to be done to provide

effective care for breast cancer patients from the time of diagnosis through survivorship. While some studies have shown strong adjustment among breast cancer survivors following treatment (see Moreira et al., 2008; Costanzo et al., 2007; and Leung, Pachana, & McLaughlin, 2014)), others have found impairments in physical, psychological, and social domains of life years after diagnosis (see Gao & Dizon, 2013; Holzner et al., 2001; Koch et al., 2013; and Loi et al., 2013). Indeed, this supports the idea of how variable breast cancer patients' experiences with cancer can be, thus leading to mixed results in the research. However, this points to the individualized, unique experience of each breast cancer patient. As such, intervention with breast cancer patients is likely to differ from one another and require tailoring to meet their unique needs. However, the more that is understood about breast cancer patients and survivors' experiences, the more clinicians can understand common presenting problems. Moreover, clinicians may gain an understanding of what concerns frequently arise and at what point of treatment or survivorship intervention is the most helpful. Brandão et al. (2015) assert that the identification of factors that facilitate or hinder psychological adjustment can help providers identify women at greater risk for adjustment problems. Moreover, Brandão et al. (2015) discuss how identifying such factors can inform psychosocial interventions designed to address women's needs when adapting to breast cancer. Thus, the identification of factors that facilitate or hinder psychological adjustment may guide the tailoring of interventions to meet individual's needs.

To assist in this research, the authors conducted a systematic review of longitudinal studies that have been done with breast cancer patients, focusing on psychosocial factors' influence on breast cancer patients. For the purpose of their paper, Brandão et al. (2015) defined psychosocial adjustment as absence of indicators of distress, including psychological symptoms, and the presence of perception of a positive quality of life. The authors specifically focused on

factors close to the time of diagnosis that may predict later adjustment to breast cancer (Brandão et al., 2015).

Regarding body image, Brandão et al. (2015) explored five different variables as potential predictors of psychological adjustment. These factors included perceived body image, appearance satisfaction, self-consciousness, self-evaluation salience, and efforts to be or feel attractive. Overall, only a few of the studies they included in their review examined body image, which hints at the relative newness of the topic. They found better body image and more satisfaction with appearance to predict better quality of life in two studies, and self-evaluation salience predicted more depressive symptoms (Brandão et al., 2015). Self-salience is beliefs about how one's appearance influences their self-worth. Furthermore, Brandão et al. (2015) found that individuals' efforts to be or feel attractive predicted fewer depressive symptoms. Thus, a positive body image emerged as a protective factor for psychological adjustment, which suggests the importance of including body image intervention with breast cancer patients.

#### Special Considerations for Metastatic Breast Cancer

Up to this point, much of this paper has focused on non-metastatic breast cancer. However, McClellandet al. (2015) focus on metastatic breast cancer, which is marked by shorter survival intervals and an emphasis on palliative care rather than curative interventions. While the survival rate is nearly 90% (Jun et al., 2011) for non-metastatic breast cancer patients who receive surgery and/or chemotherapy or radiation therapy, only approximately 25% of patients diagnosed with metastatic breast cancer survive for 5 years (McClelland et al., 2015). However, the situation is not entirely hopeless. McClelland et al. (2015) report patients with advanced disease live longer depending upon the location and extent of metastases, which has led researchers to be more attentive to quality of life issues. Breast cancer patients with metastatic

cancer appear to be excluded from many study samples, as the majority of research focuses on survivorship and long-term implications of interventions. Consequently, less is known about what is involved in quality of life for these patients, which is what McClelland et al. (2015) set out to explore.

According to McClelland et al. (2015), three disease characteristics relevant to metastatic breast cancer have been found to affect quality of life: the location of the disease, presence of bone metastases, and time since diagnosis. The authors further discuss how body image has been found to be consistently important in studies of early-stage breast cancer, but little is known about how body image affects the quality of life in women with metastatic breast cancer. In previous research, nearly half the women in the study reported distress about appearance concerns such as hair loss, weight gain, and lymphedema; such changes were reported as sources of frustration and embarrassment (McClelland et al., 2015). Moreover, body image has been found to be an important predictor of psychosocial outcomes in women with in situ (non-invasive) breast cancer, and increased concern about body integrity has been found to predict elevated distress and social disruption (McClelland et al., 2015).

Through their study, McClelland et al. (2015) found body image was highly influential in quality of life of women with metastatic breast cancer. The authors state their study was one of the few studies to examine the role of body image in quality of life in women with a goal of care that was not to be cured. Their finding that body image was a significant predictor of quality of life indicates that body image remains influential even for those living with a shortened life expectancy, and researchers should continue to study this area of research. Moreover, clinicians should keep this in mind when working with breast cancer patients who have an advanced stage of the disease; just because their goal of care is not cure, their needs are nevertheless equally

important as when working with early-stage breast cancer patients. "Indeed, this study highlights how body image affects women's emotional and physical function and, in turn, their overall well-being" (McClelland et al., 2015, p. 2942). One of the findings showed a significant increase in quality of life and physical function as body image increased, which suggests that there is a relationship between how patients see their body and how they evaluate their strength and stamina (McClelland et al., 2015). Consequently, clinicians should consider body image concerns when working with patients with metastatic breast cancer, despite their shorter life expectancies. Treatment may focus on improving their quality of life for the remaining time they have left, and this study exemplifies how body image is still influential even in later stages of the disease.

#### **Considerations of Young Women**

As mentioned, a breast cancer diagnosis can have a profound impact on quality of life, both short and long-term. Rosenberg et al. (2013) focused on the impact of breast cancer on young women (defined by the authors as aged 40 years or younger), as recent evidence suggests younger women are at an increased risk for negative quality of life outcomes. Specifically, body image may be a particularly important issue in younger women, as the loss of a breast(s), surgical scarring, alopecia, weight changes, and lymphedema are all symptoms that may impair quality of life and body image in women treated for breast cancer. At the time of Rosenberg et al.'s (2013) study, only a few studies had explored body image in young women with breast cancer. Thus, the authors wished to describe treatment-associated differences in body image concerns among young women, as they believed some body image outcomes could be responsive to intervention. They also sought to describe whether certain physical or emotional side effects would be associated with body image independent of treatment type, and anticipated that surgery

type and side effects (i.e., lymphedema, anxious/depressive symptoms, weight change) would all be related to body image (Rosenberg et al., 2013).

Consistent with previous studies, Rosenberg et al. (2013) found women who had a breast conserving procedure had the fewest body image concerns, and women undergoing radical surgery were at greater risk for body image concerns. Indeed, Dahl et al. (2010) found poorer body image in the year 2004 was significantly associated with radical mastectomy as well. However, Rosenberg et al. (2013) also found reconstructive surgery mitigated the impact of radical surgery, at least short-term, and this finding is inconsistent with previous research that has found reconstruction to negatively impact short-term body image (as outcomes can be less than expected, which was discussed by Lindwall and Bergbom (2009).

Overall, the Rosenberg et al. (2013) study suggested targets for future intervention to improve body image among young women with breast cancer, including medical and psychosocial factors. For example, the results supported the notion that body image is a domain of quality of life that can be successfully targeted. As research has shown a favorable impact of exercise on self-esteem, and participation in a weight training regimen has been associated with improve body image perception, the promotion of physical activity during treatment may improve body image and psychosocial outcomes (Rosenberg et al., 2013). Furthermore, the results have implications for surgical decision making, as women must weigh many factors when deciding what surgery is appropriate for them. They should be informed of the potential for greater body image disturbance with more radical surgery, especially if the woman has a choice between a mastectomy and lumpectomy. Nonetheless, future research should continue in this area, evaluating surgical decision making particularly in young women and associated body image/psychosocial outcomes.

Recio-Saucedo et al. (2018) argue education for young women undergoing surgery for early-stage breast cancer should be tailored to meet their unique needs. Compared to older women with breast cancer, young women have an increased risk of occurrence, higher proportion of triple-negative cancers, and higher mortality rates (Recio-Saucedo et al., 2018). Similar to middle-aged and older women, young women may struggle to make a decision regarding their surgical choice due to a lack of knowledge, individual preferences, or their emotional state after being diagnosed with breast cancer (Recio-Saucedo et al., 2018). The process moves quite quickly, and women do not have much time to make time decisions. Women have many pros and cons and familial, social, or occupational factors to consider when making a decision. However, research has shown that greater involvement in treatment decisions decreases decisional conflict and regret, which helps counterbalance the difficulties women experience when trying to make decisions on their own without adequate information (Recio-Saucedo et al., 2018). Thus, being informed about what their diagnosis means and what treatment will entail can have a positive impact on a woman's quality of life, lead to greater satisfaction with their choices, and an improved ability to cope during and after treatment (Recio-Saucedo et al., 2018).

There are certain elements of the treatment decision-making process that are expected to be a standard part of care. Such elements include the woman having sufficient information about treatment options, awareness of the risks involved in the various choices offered, an understanding of the information received, and understanding how the outcomes of treatment wil correspond with their individual values (Recio-Saucedo et al., 2018). As such, health professionals are required to provide relevant and useful information to support patients in reaching decisions that may have long-term effects on the patient's quality of life (Recio-

Saucedo et al., 2018). Recio-Saucedo et al. (2018) discuss previous research that has shown younger women differ in their decision making process as well. For example, according to Recio-Saucedo et al. (2018), younger women require more information regarding sexuality and the impact of treatment on body image, more information on what breast cancer is and options for treatment, and they prefer to participate in treatment decisions to their desired level. For example, some women may leave the decisions up to their surgeons rather than share the decision-making. Thus, it appears important to continue research in this area to determine what information and support is required when working with younger patients. This also highlights the importance of a mental health professional's role in treatment, as intervention and psychoeducation can be multi-faceted. While the surgeons may provide treatment options for surgery, a mental health professional can fill the role of providing information about how surgery has potential to affect their mental health and body image.

Recio-Saucedo et al. (2018) found young women wanted to first understand their diagnosis, as breast cancer among young women is more rare. Thus, they wanted to know statistics and figures about their type of tumor and survival rates associated with their diagnosis. Also, young women discussed the need for visual materials of different surgical procedures, particularly showing women in their age group, as many women felt the images they were provided were of older women who did not have the same surgical procedures (Recio-Saucedo et al., 2018). Moreover, the young women in the study emphasized the impact that just the thought of surgery had on their self-image (Recio-Saucedo et al., 2018). As such, understanding the options and differences between a mastectomy and breast conserving surgery would be an important component of discussion with young women.

Overall, certain aspects of treatment were more relevant to younger women, such as how treatment may affect professional life and family planning (Recio-Saucedo et al., 2018). Furthermore, attending radiation or chemotherapy sessions were more likley to affect family or working life, especially if young women have young children. Consequently, not only do young women experience a more detrimental effect on their body image, they also would like more tailored information regarding their diagnosis and treatment options. Therefore, Recio-Saucedo et al. (2018) argue that resources to deliver information in a timely manner to young women at the time of diagnosis should be developed, and they should also be provided with a supportive atmosphere in which women can voice their concerns and preferences. This again highlights the importance of a mental health professional's role, as young women may not receive such resources or be provided with a safe space to voice their concerns. Psychologists and other mental health professionals can help fill this gap by collaborating with physicians and the oncology team to meet the patient's individual needs.

#### **Cultural Considerations**

#### South African Culture

As noted above, breast cancer is a unique experience for each individual, which implies treatment is highly tailored. Moreover, important cultural factors should be considered when treating breast cancer patients and survivors as well. In a study by Kagee et al. (2017), the authors discuss how oncologists in South Africa work in a private sector that only caters to a minority of patients who can afford private health care. Further, there is a lack of public health care oncology clinics to serve patients with lower incomes, and psychosocial care is minimal to nonexistent (Kagee et al., 2017). Therefore, the authors sought to investigate the predictors of

distress and depression by using demographic, medical, and psychosocial variables such as perceived/received social support and body change stress.

Through their study, Kagee et al., (2017) found elevated levels of distress and symptoms of clinically significant depression in one-third of their participants, which is comparable to findings among American breast cancer patients. Moreover, they found significant correlations between body change stress, time since diagnosis, age, stage of cancer, and perceived and received social support with distress and depressive symptoms (Kagee et al., 2017). The authors discuss how body change stress was a significant predictor of distress and depression, which is not surprising considering the amount of physical changes with breast cancer diagnosis and treatment (i.e., hair loss, mastectomy, weight fluctuation). Again, younger age was related to distress and depressive symptoms, which the authors speculate may be due to the disruption of their daily working and family lives. For example, those with young children had to problemsolve and plan to find times when treatment could be scheduled (Kagee et al., 2017). Furthermore, in their analyses, the significant relation of age with distress and depression was no longer present once body change stress was accounted for, which may suggest body change stress is a mediator of the relationship between age and general well-being among breast cancer survivors (Kagee et al., 2017). This finding indicates the importance of intervention on body image with breast cancer patients, as it appears to be influential at various stages of life and often relates to psychological health. Additionally, it shows the need for psychosocial counseling for breast cancer patients in South Africa who may not be able to afford healthcare.

#### Traditional Chinese Culture

Also, there may be variance in treatment among Chinese culture, which will be discussed more in depth later. According to traditional Chinese culture, the husband has more power than

the wife and women are to be submissive and hide their feelings (Fang, Chang, & Shu, 2015). Further, marriage is believed to be predestined and unalterable, so Chinese women tend to tolerate nearly anything to maintain their marital relationship. As so much of the culture shapes the relationship, it may be more difficult for Chinese women to perceive empathy from their partners, and they are more vulnerable to mental health problems (Fang et al., 2015). Thus, understanding these social and cultural systems would be beneficial for the clinician to know when developing techniques to help Taiwanese and Chinese women.

#### Latina Survivors

In addition, Buki et al. (2016) conducted a study examining body image concerns among Latina breast cancer survivors. While there are similarities between non-Latina white women and Latina women's experience with breast cancer (such as the side effects of treatment and survival rates), there are noteworthy differences as well. Buki et al. (2016) report that Latina women are more likely to be diagnosed with breast cancer before the age of 50, and they tend to have more advanced staging which leads them to have a higher rate of mastectomies. They are also more likely to receive chemotherapy (Buki et al., 2016). Considering mastectomies and chemotherapy are more likely to negatively impact a women's body image, it may be that Latina women suffer from worse body image than do their non-Latina white counterparts. Indeed, Buki et al., (2016) cite body image as a salient concern for Latina breast cancer survivors, and immigrant Latina survivors report greater frustration regarding weight gain, sexual disruption, feelings of unattractiveness, and loss of femininity more than other ethnicities. Moreover, Latina women have reported feeling afraid of their male partner's reactions to their missing breast and loss of sexual desire, which is concerning considering poor body image has been identified as a risk factor for depressive symptoms within 5 years of diagnosis (Buki et al., 2016). Additionally,

Buki et al. (2016) report Latina survivors with lower levels of acculturation are less likely to receive reconstructive surgery, even if they want to know more about the procedure. Thus, little is known about Latina women's coping strategies and their presenting concerns, which indicates they are a population in need of more attention. This highlights the importance of mental health professionals to be culturally competent and willing to work with Latina women, as body image may be more of a concern than we are currently aware of.

It is important to discuss the findings of Buki et al.'s (2016) study as they have implications for working with Latina breast cancer survivors. Although body image concerns varied by stage of survivorship, women who had mastectomies felt the greatest loss, stating they felt incomplete and saw a "different person" when looking in the mirror (Buki et al., 2016, p. 1339). Moreover, hair loss due to chemotherapy was very distressing, and some women reported feeling "crippled, ugly, ashamed of their looks, less feminine, and even horrified" when looking in the mirror (Buki et al., 2016, p. 1339). Not surprisingly, these changes affected their selfesteem and "served as a daily reminder of having had cancer" (Buki et al., 2016, p. 1339). In addition, their newfound poor body image had an effect on intimate relationships that left them feeling ashamed and embarrassed to undress in front of their male partners, and women reported feeling afraid of being rejected and concern about how their partner would tolerate such physical and emotional changes (Buki et al., 2016). Some women even reported avoiding social situations such as going to the beach or wore clothing to hide signs of their surgery (Buki et al., 2016). Even women in the long-term survivorship stage reported they would have liked more information on how to cope with body image issues as they went through treatment, suggesting body image acceptance is an ongoing process (Buki et al., 2016). Although acceptance was more prevalent among long-term survivors, they stated, "A women needs psychological help to find

herself again, to feel again...that you are worth the same" (Buki et al., 2016, p. 1339). Emotional support, instrumental support, religion, and cognitive changes to accept the new version of themselves were critical aspects of intervention with these women. Indeed, one key difference Buki et al. (2016) discuss between women who did and did not accept their body image was their ability to adapt to their altered image, indicating cognitive flexibility is important in treatment.

Overall, much of the findings for Latina women were similar to non-Latina white breast cancer survivors. However, one of the main differences is in their access to information; there is a lack of information about body image changes, reconstructive options, and exposure to survivor role models in Spanish (Buki et al., 2016). Thus, Latina breast cancer patients do not appear to be receiving psychoeducation on body image changes and reconstructive options as much as other women, and supportive services in Spanish should be developed (Buki et al., 2016). Furthermore, Buki et al. (2016) findings suggest the inclusion of male partners is important in treatment, as they play a key role in accepting one's body image for this population. Thus, mental health professionals may wish to do couples therapy when working with Latina women.

#### Greek Culture

Lastly, Anagnostopoulos and Myrgianni (2009) studied body image among Greek breast cancer patients who had undergone mastectomy or breast conserving surgery. At the time of Anagnostopoulos and Myrgianni's (2009) study, the annual rate of breast cancer in the United States was approximately 190,000, while it exceeded 400,000 in Europe. Such an astounding statistic immediately grabs one's attention. This study aimed to test the type of surgery as a predictor of general body image concerns as well as answer whether there are body image differences associated with then-current offered surgical procedures (Anagnostopoulos &

Myrgianni, 2009). Through their study, the authors found significantly higher levels of body appearance dissatisfaction and reduced attractiveness among women with mastectomy compared to those who had a lumpectomy, which is consistent with findings among American women (Anagnostopoulos & Myrgianni, 2009). Furthermore, Anagnostopoulos and Myrgianni (2009) report the women in their study who received mastectomies felt "less attractive, and more selfconscious, did not like their overall appearance, and were dissatisfied with their scar, and avoided contact with people" (p. 319). Additionally, women who had undergone mastectomy reported worse body image compared to the general female Greek population (Anagnostopoulos & Myrgianni, 2009). Consequently, intervention with Greek breast cancer patients is also needed, and one key aspect of treatment should be reducing the differential importance of appearance-self aspects, revaluing alternative aspects of the self, or making the "appearanceself" less central (Anagnostopoulos & Myrgianni, 2009).

### **Qualitative Research and Interviews with Breast Cancer Survivors**

#### **Qualitative Studies**

While much of this paper has focused on quantitative research, a review of the qualitative research in this area is also important to consider. Interviews with breast cancer patients and survivors provide insight into their experience with the disease. Thus, the following section will focus on qualitative research as well as an interview this author conducted with her mother.

In a study by Lindwall and Bergbom (2009), they interviewed 10 women between the ages of 43 and 62. Each of the women was a survivor and told their stories retrospectively about their experiences. Overall, they described the theme of "my body as a stranger" containing four constituents: my body has failed me, my body—a prison, a home where a struggle is taking pace, and to make friends with the altered body (Lindwall & Bergbom, 2009). In terms of the body

failing the women, they felt they their body had "turned itself into a home for an undesirable and uninvited guest" (Lindwall & Berbom, 2009, p. 282). Learning that a tumor had made its way into their body left feelings of disappointment and mistrust; one woman in the study stated, "After the mammography it was hard to accept that I had a tumor in my breast and I felt let down by my own body which had given me no indication that there was anything wrong…" (Lindwall & Bergbom, 2009, p. 282). Furthermore, the women reported feeling as if their body was prison as they became dependent on others; their decreased abilities led to a sense of helplessness and that their body became an obstacle to daily activities. Therefore, body image distress can lead to psychological distress as well, and clinician should be aware of this when working with breast cancer patients and survivors.

Lindwall and Bergbom (2009) go on to describe more of the women's responses, including discussing how their body felt like a home in which a struggle took place. They discuss how there was a lack of choice in the matter; if they did not get the surgery and treatment, they would die and they were afraid the body was hiding other malignancies. However, they would just have to accept any changes to their physical appearance. Lindwall and Bergbom (2009) cite one woman as saying, "I felt as if I had been cheated with no chance of defending myself...it seems unfair" (p. 284). Eventually, however, it seems the women were able to acquaint themselves with their new bodies, although it was not easy. Lindwall and Bergbom (2009) describe it as a draining process, noting one woman stated, "…sometimes I cry and sometimes I am happy to have gotten through this difficult time" (p. 284). Although she was able to acknowledge the strength of her body for surviving the cancer, it was nonetheless a new normal she had to adjust to. It is this author's opinion that this applies to all women who have survived or been diagnosed with breast cancer. They are no longer the same women they were prior to the

life-threatening disease, both mentally and physically. One woman reported, "If I look at myself in the mirror I think it looks fine; the scar is neat. From the point of view of appearance it looks fine, but I feel different..." (Lindwall & Bergbom, 2009, p. 284). This study and included interviews highlight the importance of working with breast cancer patients, specifically acknowledging any changes in body image. Breast cancer is unique because it takes away the part of a woman that is a fundamental part of her body; the breasts are valued as part of a feminine identity. Helping patients accept their new body and empowering them to do so appears to be a necessary part of intervention.

Koçan and Gürsoy (2016) also conducted interviews and found four themes and seven sub-themes, with the main themes being: meaning of the breast, mastectomy and me, my body image and body image changes, and social life. Many of the women reported the breast meant femininity, beauty, motherhood, and attraction (Koçan & Gürsoy, 2016). Regarding body image, the most common description of appearance was that they looked "incomplete and half because they did not have breasts" (Koçan & Gürsoy, 2016, p. 147). Indeed, one woman stated, "I look in a mirror and the result is deformity" while another stated, "I am ashamed so I try to cover my breast with my arm" (Kocan & Gürsoy, 2016, p. 147). Not surprisingly, the removal of breasts also affected their feelings of self-confidence, and many women changed the way they dressed to wear loose-fitting clothing. Furthermore, Koçan & Gürsoy (2016) found participants to be concerned about their relationships with their husbands, as one woman stated, "Maybe my husband feels nothing bad towards me, but I do not want to show myself to him" (p. 148). These results reinforce the extent to which breast cancer affects body image and other areas of life due to the changes in body image, and there should be available interventions targeting such concerns.

Chuang et al. (2018) posit that breast cancer is being increasingly recognized as a chronic illness. Even after the cancer is removed, the threat of the cancer returning remains. The individual has to adjust to a new normal in which they have to move past their diagnosis and cancer-related bodily changes. However, reaching this new normal can produce emotional distress as the woman tries to keep up with her social roles while trying to adjust to life without one or both of her breasts. Again, Chuang et al. (2018) highlight how the breasts symbolize feminine identity, womanhood, beauty, and ability to nurture children. Thus, identity may become a complicated issue for breast cancer survivors, even though much of a female's ideal body image is constructed by society. Women tend to internalize sociocultural norms that influence how they view their appearance, and how much they identify with those norms can influence their identity as well (Chuang et al., 2018). For example, Western culture tends to objectify women's bodies, particularly the breasts. If a woman has internalized a high sense of self-objectification about her body, she may monitor and evaluate her body appearance to the point that it leads to poor quality of life (Chuang et al., 2018). Indeed, previous research has shown that women with higher objectified body consciousness report a more negative body image and depression (Chuang et al., 2018).

In contrast to Przezdziecki et al.'s (2013) definition of body image that primarily focuses on physical appearance, Chuang et al. (2018) define body image as an individual's subjective perceptions of her body experience, but it also includes valuation of the physical, psychological, and social domains of human life. As has been discussed, Chuang et al. (2018) reinforce the research that women who undergo a mastectomy experience more body deformation, loss of femininity, and feelings of insecurity; all of which can corrupt a woman's body image. Moreover, the removal of a breast or breasts can be traumatic for women, as was discussed in the

study by Classen et al. (2001) (Chuang et al., 2018). Through the loss of a primary symbol of femininity, a core piece of women's body image, a woman will need time to adjust to her new body. For the majority of people, body image is built up throughout their lifetime. When the body is radically changed through breast cancer treatment, one can assume it would take time to adjust to the altered body image. Chuang et al. (2018) notes that most research has focused on follow-up studies one or two years following a mastectomy; their study focused on women's body perceptions who had breast cancer treatment five or more years ago. By understanding how long women suffer from body image distress, clinicians and other professionals can continue to help women adapt to their new life.

Through their study, Chuang et al. (2018) found three themes to emerge from interviews with breast cancer patients who had never had reconstruction: restoration of the body image, abandonment of objectification, and redefinition of self. In terms of restoring the body, the women who had a mastectomy initially felt disfigured and insecure, but over time, they attempted to disguise their body change while in public to avoid social judgment (Chuang et al., 2018). One woman stated, "I don't want people to think my breasts are different," and Chuang et al. (2018) cited the importance to the women of making the breasts look "normal" by wearing certain types of clothing (p. 58). Such behaviors and statements were classified as a subtheme, "normalizing appearance" within restoration of body image. Restoration of body image also included return to a normal life, in which women reported that maintaining their typical daily activities was useful in restoring their lost sense of self (Chuang et al., 2018). The next theme Chuang et al. (2018) discussed was the abandonment of objectification, which referred to the reduction of persistent inspection and evaluation of one's physical appearance. It appears that 5 years post-treatment, the women in this study were able to remove themselves from an

observer's perspective and embody the idea that health is a core value of the body rather than just its appearance. Thus, this theme included the subthemes of embodying the body and reconstructing a new body. Following the loss of their breast(s), women had to reflect on the nature of femininity and find a new sense of femininity without breasts. One woman stated, "I just lost a very small part of my body, but I still can do what other women do" (Chuang et al., 2018, p. 59). Such statements highlight the importance of emphasizing functional roles and the importance of health in intervention with breast cancer patients, although it is still necessary to address any remaining body image concerns. Lastly, redefinition of self-involved self-disclosure, emphasis of productive roles, and infusion of energy and self-growth (Chuang et al., 2018). For example, women reported feeling supported and loved when they disclosed their insecurities to their partners, which reinforces the findings from (Fang, Chang, and Shu, 2015). Again, the aspect of social support appears to be very important in intervention with breast cancer patients, particularly concerning body image. As many women appear to be concerned with how their relationship with their partner will change (i.e., if their husband still finds them attractive), involving the partner may be useful in treatment if possible. Furthermore, support from family, religion, and other women helped the women to deal with difficulties from their breast cancer (Chuang et al., 2018). One woman stated, "God's love for me was so great that I could survive to continue helping and serving others;" she had found new meaning in life from her experience with breast cancer (Chuang et al., 2018, p. 60). This statement coincides with the findings from Paiva et al. (2013), in which the authors found prayer to be a powerful coping skill for women with breast cancer. Consequently, religion may be an important aspect of intervention on body image with breast cancer patients, depending on the individual's needs and beliefs.

Overall, the eight women who participated in Chuang et al.'s (2018) study appeared to have overcome the loss of their breasts and had found a new self-value at the 5 year posttreatment mark. From their statements, future studies and interventions may focus on the influence of productive roles on recovery of body image or the abandonment of objectification. Additionally, future interventions may consider incorporating partners or teaching effective communication skills to self-disclose to their partner or family in treatment.

As was discussed in a previous study Recio-Saucedo et al. (2018), being well-informed and more physician involvement can be beneficial to breast cancer patients. It has also been discussed that younger women tend to report more negative body image than do older breast cancer patients. Glassey et al. (2017) focused their study on whether or not younger women (aged less than 35 years) psychosocially benefited from psychological consultation prior to receiving a bilateral prophylactic mastectomy (BPM). Bilateral prophylactic mastectomy is a risk-reducing surgical procedure women undergo if they are at high risk of developing breast cancer (Glassey et al., 2017). Although women may undergo BPM for various reasons, the fear of developing breast cancer at some point in their lives is reportedly a common motivator, and this fear results in many women undergoing the surgery without considering the psychological, emotional, and physical consequences (Glassey et al., 2017). For example, a woman who has a family history of breast cancer may proactively undergo BPM early in life to reduce her risk of developing breast cancer.

Glassey et al. (2017) asserts that research suggest women could benefit from psychological support prior to BPM so they understand the information received and have realistic expectations of potential outcomes. However, such consultation is not routine practice, and Glassey et al. (2017) cites previous research that has shown high risk women wish they

would have had a psychological consult when considering BPM. Although the consultation would not make the decision for the women, the professional could assist in the decision-making process and help the woman prepare for surgery. Indeed, one study showed that of 70 women, 19% reconsidered their decision to undergo BPM after psychological consultation (Glassey et al., 2017). This suggests psychologists have a critical role in breast cancer treatment. Moreover, it indicates how psychologists must be well-informed about both the psychological and physical outcomes of breast cancer.

In the case of a BPM, a woman will lose both of her breasts, potentially at a young age in which she is more likely to experience body image distress. Glassey et al. (2017) reported that women experience negative body image, decreased satisfaction with intimacy, and poor emotional adjustment following BPM. Therefore, body image should be a routine part of discussion, particularly in the case of BPM and psychological consultation, as the consultation prior to surgery allows women to ensure they are making an informed decision. To further support the idea that psychological consultation should be a routine part of care prior to BPM surgery, Glassey et al. (2017) discuss previous research that found women believed psychological consultation should be mandatory, although the therapist should be familiar with familial cancer and BPM. This would give the patients an opportunity to discuss psychosocial concerns, as they may not be able to do so with their doctors and oncology team.

Through their study, Glassey et al. (2017) found that younger women, 35 years old or younger, who underwent psychological consultation prior to BPM had improved psychological well-being, body image, and intimacy post-surgery as compared to women who did not receive consultation. The authors assert that the women in the study who did not receive psychological consultation appeared unprepared for the consequences post-surgery, and they experienced in

decreased psychological well-being as well as negative body image. However, those who had consultation appeared to adjust better psychologically and felt more satisfied with the outcomes, reporting positive body image and femininity (Glassey et al., 2017). For example, some women expressed concern about losing their breasts during consultation, and one woman described how the psychologist normalized and validated her feelings, stating, "I was worried about what if I missed my breasts...she said that people who are very stressed out and cry a lot...before their surgery often come out a lot better because they have already gone through all those emotions" (Glassey et al., 2017, p. 636). On the other hand, one woman who did not undergo psychological consultation stated, "...they don't look natural or nice...I'm not going to take my top off for anyone...it's had a massive impact to my self-confidence" (Glassey et al., 2017, p. 637). Hence, the implementation of routine psychological consultation should be in place for women considering BPM, as psychological support may help women make an informed decision and understand the consequences of surgery. Although this study did not use patients with active breast cancer or breast cancer survivors, the results are nonetheless important concerning body image outcomes and the usefulness of a psychologist with this population.

# Interviews with Cancer Treatment Center of America (CTCA) Staff Members

In preparation for this essay, the author of this paper visited the Cancer Treatment Center of America (CTCA) in Philadelphia, PA. For the sake of clarity, the author will use personal pronouns to discuss her experience. While at the CTCA, I was able to meet with their psychiatrist, the head of their spa, and one of the pastors involved in breast cancer treatment. Meeting with these individuals was extremely informative in various ways. I was able to meet with the psychiatrist for an hour, and while the entire meeting was informative, she left me with a list of four components she finds extremely important when working with breast cancer

patients. These four elements included intimacy, humor, adaptability/flexibility, and accepting/embracing the new self (L. Bornfriend, personal communication, 2019). We discussed how each of these components are essential in treatment with breast cancer patients, especially for the psychiatrist as she primarily works with individuals with advanced stages of breast cancer. Although some of these components have been or will be mentioned throughout this paper, it is interesting to find new perspectives on each one. For example, intimacy may be affected when a woman's body image changes (L. Bornfriend, personal communication, 2019). Even if her partner's perception of her does not change, her perception of herself may affect her in such a way that she is uncomfortable with being intimate with her partner (L. Bornfriend, personal communication, 2019). Moreover, I believe intimacy goes deeper than a sexual relationship. Breast cancer affects a woman's entire life and mindset, and she may or may not feel comfortable expressing her concerns regarding her treatment or body concerns to her partner. Thus, addressing issues of intimacy in treatment with breast cancer patients appears to be a crucial aspect of intervention.

Furthermore, the psychiatrist highlighted the importance of humor (L. Bornfriend, personal communication, 2019). She discussed one woman who was a breast cancer survivor and lost all of her hair through chemotherapy (L. Bornfriend, personal communication, 2019). The psychiatrist said the patient swore she would wear a wig or grow her hair back once she was done with treatment, but through treatment, she realized she did not want to grow it back or wear a wig (L. Bornfriend, personal communication, 2019). Rather, she was able to find humor and lighten her situation by remaining bald and decorating her head for the holidays. Additionally, some women choose not to have reconstructive surgery and get decorative tattoos to cover their scars instead (L. Bornfriend, personal communication, 2019). When given the choice whether or

not to have nipple reconstruction, some women choose to get them tattooed on. Thus, finding "humorous" ways to cope with the effects of treatment on body image is extremely important as well. Also, such coping methods imply flexibility and acceptance (L. Bornfriend, personal communication, 2019). Rather than trying to get back what they had lost (which is also okay to do), the survivors chose to move forward and embrace their new body that had battled against and won the fight with breast cancer. The psychiatrist stressed the utmost importance of acceptance as a part of intervention (L. Bornfriend, personal communication, 2019). Without accepting their circumstances, diagnosis, and mental and physical changes with medical treatment, patients cannot heal and move forward. It requires a mindset shift of making the most of what time is left and figuring out what values you want to live by (L. Bornfriend, personal communication, 2019). Consequently, I find it intriguing acceptance and commitment therapy (ACT) has not been utilized more with breast cancer patients. However, intervention with breast cancer patients and survivors is discussed more in depth below, with implications of how the components of ACT may be useful in future interventions.

Furthermore, I was able to tour the spa at CTCA and speak with the woman who runs it, certified trichologist Danielle Johnson. At the CTCA, treating body image concerns is a standard part of treatment. They offer customized wigs, massages, manicures and pedicures, and makeovers. They also provide various hair products to help regrowth, head scarves, and other merchandise to assist patients during and after treatment. However, one of the most remarkable parts of the spa was the woman I spoke to. She was extremely informative and qualified for her position. She appeared to be the glue that brought all of the aspects of the spa together. She discussed how she individualized treatment for each patient, as each patient brought in different concerns (D. Johnson, personal communication, 2019). Furthermore, she informed them as to

why they were taking treatment so slowly, or why they were taking each step (D. Johnson, personal communication, 2019). For example, when women's hair barely started to grow back and they wanted to immediately dye it, she would explain why it would be better to wait (D. Johnson, personal communication, 2019). Although mental health professionals may not be directly working with such body image treatments, it is important to note how informing the patient is an important aspect of intervention. Explaining the reasoning and educating them more about treatment can be helpful to the patient, as has been discussed in terms of patient-centered communication.

Lastly, it will later be discussed how religion can be an important aspect of treatment, depending on the patient. At the CTCA, the pastor is very involved in caring for the patients and he was able to discuss his role in detail. Although he is also a marriage and family therapist, he did not always act as the therapist. Rather, simply being the religious figure to which patients can turn to in times of need is one of his roles (W. Scanterbury, personal communication, 2019). Thus, treatment at the CTCA is well-rounded and the availability of such a variety of resources appears to contribute to much of the patients' satisfaction. Such resources and treatment options should, in theory, be a standard part of care with all breast cancer patients.

#### Interview with Author's Mother

Due to my mother's experience with breast cancer, I found it important to do an informal interview with her to gain more insight into the challenges she faced in treatment. In 2017, my mother was diagnosed with ductal carcinoma in situ (DCIS). Luckily, her cancer was detected very early at stage zero and was non-metastatic. However, my mom recalled how invalidating people's responses were when they found out her diagnosis. She recalled people saying things like, "Oh, it's just breast cancer; you can just get those cut off" or "At least it's stage zero and

not an advanced form" (C. Cooling, personal communication, 2019). Such statements bothered her, as to her, the thought of having breast cancer was still terrifying (C. Cooling, personal communication, 2019). These individuals who had not had cancerous, malignant cells growing in their body could not understand how any form of cancer affects a person's mind. My mother stated she was hurt by those statements, as it felt as though they were making light of her situation (C. Cooling, personal communication, 2019). Furthermore, she recalled how slow the process seemed to move (C. Cooling, personal communication, 2019). She was diagnosed in June 2017, and her surgery was not scheduled until August 2017. She stated, "Two months? Wouldn't you think they would get this out of my body as quickly as possible?" and recalled the helpless feeling of going on with her life while this cancer sat inside her (C. Cooling, personal communication, 2019). However, she was not one to sit still and let her life pass by while she waited for her surgery. In July 2017, she decided she wanted to hike a specific trail that led to a pinnacle on a mountain. To get to the pinnacle, a person must rock-climb to the top with no ropes or gear. This did not discourage her; she successfully climbed that mountain and felt it was symbolic of how she would defeat breast cancer as well. As she had always been physically fit, she wanted to prove to herself that her body was still capable of accomplishing things when others expected her to feel weak.

While she conquered the mountain, she knew her battle had not yet begun (C. Cooling, personal communication, 2019). She was faced with a heavy decision: to get a mastectomy or opt for breast conserving surgery. My mom stated she wrestled with this decision, as she did not want to have her breasts removed, but if she opted for breast conservation, there was a higher chance of them not removing all of the cancer as well as a higher risk it may return (C. Cooling, personal communication, 2019). She now admits she was worried about her body image when

trying to make this decision (C. Cooling, personal communication, 2019). Not only did she have to decide whether or not to remove her breasts, she also had to decide whether or not to keep her nipples or undergo nipple reconstruction at some point. She discussed how the doctors urged her to eventually undergo nipple reconstruction as it "would be beneficial for her body image" (C. Cooling, personal communication, 2019). Although the doctors may have had good intentions, she discussed how she felt it should be her decision, and she ultimately decided to forego nipple reconstruction (C. Cooling, personal communication, 2019). For some individuals, though, nipple reconstruction may be extremely important to them. This is yet another example of how tailored treatment and body image concerns can be among breast cancer patients, although it is important to note my mother's doctor did bring up the subject of body image and began a conversation regarding the topic.

Eventually, my mom decided to get a mastectomy, as she felt it would be better for her health (C. Cooling, personal communication, 2019). Immediately following her surgery, she had tissue implants placed to expand her chest out to the size she wanted, as she wanted reconstructive surgery. The procedure left her in quite a bit of pain, and her physical abilities were very limited. While she exercised every day prior to her surgery, she was unable to exert herself as she once had. It took several months before she was able to lift weights as she had before, and this took a toll on her body image. She recalls thinking, "My arms used to be so strong and muscular. Look at them now; they're so flabby and weak" (C. Cooling, personal communication, 2019). Furthermore, she found she was carrying weight differently, as if it was sitting on her stomach more than it used to. She also had drains inserted in her chest cavity postsurgery, which she had for two weeks. During those two weeks, she wore flowy shirts and found ways to cover them up so others would not see them. Such changes to her appearance were

upsetting to her, and she admits even now she struggles with her body image at times (C. Cooling, personal communication, 2019). My mother had reconstructive surgery and implants inserted in December 2017, and in November 2019, she still reports trouble with her body image (C. Cooling, personal communication, 2019). She has experienced a loss of sensation in her breasts, they look and feel different, and she reported she does not like the way they look at times. Furthermore, she stated, "I worry whether other women my age can tell they're fake. I'm 50 years old and I wonder if they recognize they are not normal or that they are 'too high up'" (C. Cooling, personal communication, 2019). Thus, she is still struggling to accept her new body two years later, which highlights the importance of mental health treatment being available for women who need it. Moreover, it highlights the need for interventions targeted at body image among breast cancer patients and survivors.

My mother also mentioned how sometimes other's intentions, as helpful as they may intend to be, end up being more harmful than beneficial (C. Cooling, personal communication, 2019). For example, she discussed how a woman who had recently had the same type of breast cancer as her continued to give her helpful tips to deal with the bodily changes (C. Cooling, personal communication, 2019). She stated, "She told me to get button-up shirts and front zip-up bras because I wouldn't be able to move my arms very much, but I just kept getting frustrated because I would go to the store looking for those specific items and couldn't find any I liked" (C. Cooling, personal communication, 2019). My mom went on to say she appreciated the intentions, but at some point, she had to figure out how her breast cancer was affecting her differently (C. Cooling, personal communication, 2019). She said, "I am not her; I had to figure out how breast cancer was affecting me and how I was going to deal with it my own way" (C. Cooling, personal communication, 2019). Thus, although it can be helpful to have the support

from others, breast cancer treatment and the journey is individualistic. As many billboards say, "There is no routine breast cancer." Consequently, intervention should be highly tailored to the individual to meet their specific needs.

Nonetheless, my mother remarks religion was such an important coping mechanism during her treatment, and still is today (C. Cooling, personal communication, 2019). Although very limited research has been done studying the role of religion as a coping mechanism for breast cancer patients, the (Paiva et al. 2013) study demonstrated the usefulness of prayer as a coping strategy. My mom stresses how much her faith in God helped her cope with the various decisions and issues she had to make during treatment, which suggests the importance of religious figures being available for consultation and discussion, such as the pastor at CTCA is (C. Cooling, personal communication, 2019). Indeed, on the morning of her mastectomy, she randomly opened her Bible and was led to the verse:

"The Lord is my strength and my defense; he has become my salvation. Shouts of joy and victory resound in the tents of the righteous: 'The Lord's right hand has done might things! The Lord's right hand is lifted high; the Lord's right hand has done might things!'

I will not die but live, and will proclaim what the Lord has done" (Psalm 118:17). She stated, "God led me to that verse" and she is a witness today to many others (C. Cooling, personal communication, 2019). Breast cancer, as one can see, affects so many aspects of a person's mental and physical health and as such, it requires multi-faceted treatment.

### **Assessment of Body Image in Cancer Patients**

As previously mentioned, body image is considered to be a key determinant of differences of quality of life, especially when comparing mastectomy versus breast conserving treatments. Furthermore, body image is believed to be an important component of quality of life,

but Hopwood, Fletcher, Lee, and Al Ghazal (2001) point out there has been a lack of a suitable scale to measure body image in cancer patients. While various different scales have been used, one of the most commonly used scales being the Body Image Scale (BIS; Hopwood et al, 2001). Hopwood et al. (2001) identified a need for a short body image scale to use in clinical trials, so they developed the scale with the European Organization for Research and Treatment of Cancer (EORTC) Quality of Life Study Group and it was tested among breast cancer patients following revisions and psychometric testing. Overall, Hopwood, et al. (2001) found the scale had good reliability and good clinical validity. Thus, the results of their study support the validity and use of the BIS as a brief assessment instrument for body image changes in patients with cancer.

# **Intervention with Breast Cancer Patients**

#### **Proposed Frameworks**

Due to the novelty of research about concerns among breast cancer patients and survivors, there are few interventions specifically targeting body image with this population (Chen et al., 2012). Fingeret, Teo, and Epner (2014) reinforce the relative newness of intervention on body image for cancer patients. However, one thing Fingeret et al. (2014) discuss that is not included in many other articles is theoretical models of body image. The authors discuss Cash's cognitive-behavioral model of body image that has received widespread recognition, and it forms the basis of empirically-supported interventions for body image in the general population (Fingeret et al., 2014; Cash, 2011). Although it does not specifically apply to cancer patients, who have a very unique experience, this author believes the model is adaptable and may be used with breast cancer patients as well. Cash's model focuses on two primary types of body image attitudes: body image evaluation and body image investment (Fingeret et al., 2014; Cash, 2011). He believes these two attitudes drive a person's thoughts, feelings, and behavior's related to appearance (Cash, 2011). In his model, body image evaluation refers to the

degree to which one is satisfied with her or her appearance, while body image investment refers to the value or importance a person places on appearance and physical attributes (Fingeret et al., 2014; Cash, 2011). Furthermore, body image evaluation also includes whether there is a discrepancy between how a person perceives themselves versus their desired characteristics (Cash, 2011). Consequently, as a woman with breast cancer undergoes many involuntary bodily changes, this discrepancy between their ideal image and actual body may become more pronounced. This discrepancy may produce a more negative reaction particularly in individuals who have a high body image investment, as the cancer-related changes may greatly differ from their body image ideal.

On the other hand, Fingeret et al. (2014) conceptualize body image concerns based on a continuum, which frames the concerns as a normative experience rather than pathological. For example, those on the mild to moderate end of the spectrum may have difficulties adjusting to body image changes, but still engage in social situations even if they feel self-conscious. However, those with extreme discomfort about their bodies may become socially isolated as they may feel ashamed, guilty, or embarrassed (Fingeret et al., 2014). Indeed, Castonguay et al. (2017) found body-related shame to be associated with low levels of moderate to vigorous physical activity, suggesting shame may prevent a survivor from engaging in social situations as well as physical activity.

In reviewing the literature, Fingeret et al. (2014) found 12 studies targeting body image difficulties in breast cancer patients, regardless of the year published. For the sake of brevity and updated information, the author of this paper has not included all 12, as the majority of this paper focuses on research within the past 10 years. However, it is noteworthy to review the findings of Fingeret et al. (2014) review of the intervention studies they found. As mentioned, cognitive-

behavioral therapy (CBT) was the most frequently used intervention, and most of them were brief. Nonetheless, the interventions were found to be effective and the patients reported improvement in their body image (Fingeret et al., 2014). Moreover, the interventions were delivered in a group or couples format, and for the studies that conducted follow-up assessments, improvements in body image were sustained at 6 and 12 month follow-ups (Fingeret et al., 2014). This suggests the group or couple format of intervention is effective and can be used in future interventions. Moreover, Fingeret et al. (2014) argue the evidence points to the use of CBT-based interventions for addressing body image concerns among breast cancer patients. However, as discussed in this paper, recent research is pointing to the usefulness of acceptance and commitment therapy (ACT) and mindfulness based interventions is well. Due to the relative lack of research in this area, more support is still needed.

Pragmatically, Fingeret et al. (2014) study suggests their findings are applicable beyond mental health professionals. While psychologists are an important part of care, psychologists are not often included as a standard part of the patient's treatment. Often, their first contact is with their doctor and oncology team, and research has shown the importance of using patient-centered approaches to challenging conversations. As concerns about body image appear to be prevalent among breast cancer patients, Fingeret et al. (2014) posit that discussing body image with patients should be as routine as discussing their medications. While this may not be feasible for every patient, it is important for clinicians to know factors that may place a person at higher risk for developing a negative body image through treatment. As such, it is important that research continues in this area and that practical application of the information is created so it is useful within both medical and psychological practice. Fingeret et al. (2014) include a convenient table in their article about the potential indicators of body image difficulties. The table includes:

unrealistic expectations about treatment outcomes for appearance and functioning; preoccupied with concerns about upcoming appearance changes; difficulties making treatment decisions due to concerns about appearance/body changes; difficulties with or avoidance of viewing oneself after treatment; highly dissatisfied with appearance outcome following treatment; preoccupied with perceived or actual physical flaws resulting from cancer and/or its treatment; avoidance of social situations due to appearance/body changes; romantic relationship distress due to body image changes; considerable time and effort spent in appearance-fixing behaviors; and persistent distress, anxiety, or depression due to body image changes (Fingeret et al., 2014). This article and table may be a useful resource when identifying women at increased risk for body image distress and has the potential to lead to earlier detection and intervention of problems.

As many patients may be too embarrassed to mention their concerns about body image voluntary, it seems important clinicians and professionals proactively inquire about body image if an issue is suspected (Fingeret et al., 2014). Stemming from this idea, Fingeret et al. (2014) proposed a framework for approaching conversations about body image: *The Three C's*. This framework includes providers reminding patients that body image difficulties are *common*, and normalizing such concerns can decrease shame and stigma (Fingeret et al., 2014). It also includes asking breast cancer patients about specific *concerns* they have related to their bodies, which may be done through using open-ended questions and empathic responses (Fingeret et al., 2014). Lastly, patients should be asked about the *consequences* of their body image difficulties. In other words, assess for the impact on their daily functioning, particularly focusing on social, emotional, or occupational functioning (Fingeret et al., 2014). Although the article is directed at health professionals rather than mental health workers, the findings and implications are equally important to both fields. Overall, educating the patient about what to expect in terms of

appearance, connecting them with relevant community resources, obtaining therapy if needed, and following up with breast cancer patients is, or should be, an imperative aspect of treatment for breast cancer patients and survivors who struggle with body image.

# Self-Compassion and Mindfulness

Even Przezdziecki and Sherman (2016) explicitly state, "The body image-related concerns of breast cancer survivors following treatment are not always adequately addressed." However, self-compassion has been shown to decrease psychological distress. Self-compassion is the capacity to adopt a kind, caring attitude toward oneself in times of difficulty, and Przezdziecki and Sherman (2016) designed a self-compassion based writing activity to assist adjustment to bodily changes that occur during breast cancer. For example, breast cancer treatment may result in changes to breast appearance or removal of the breasts. It may also lead to scarring, arm and shoulder mobility restriction, changed nipple and breast sensation, lymphedema, hair loss, hormonal changes, treatment-induced menopause, skin pigmentation, and long term weight gain (Przezdziecki & Sherman, 2016). Such a multitude of changes can affect a women's body image, which Przezdziecki and Sherman (2016) define as an individual's cognitions, feelings, behaviors, and evaluations toward one's body. While it is standard for breast cancer survivors to receive medical feedback, information from a variety of sources, and peer support programs to help with concerns such as body image, Przezdziecki and Sherman (2016) cite research that indicates women have expressed unmet needs regarding how to cope with bodily changes within the first year following breast cancer diagnosis. Furthermore, women on average are being diagnosed with breast cancer at a younger age, and it has been discussed how younger women are more vulnerable to body image concerns. Thus, without effective

interventions in place, the amount of women experiencing body image disturbance is likely to increase over time (Przezdziecki & Sherman, 2016).

Przezdziecki and Sherman (2016) argue that research is beginning to notice the importance of a woman's perception of herself in treatment. The way in which a woman views herself, and the attitude she adopts in the context of her cancer-related situation, can influence how she perceives and experiences treatment-related bodily changes (Przezdziecki & Sherman, 2016). As such, psychological approaches such as mindfulness and self-compassion may hold promise for the basis of future interventions. As mindfulness involves being aware of the present moment with a non-judgmental attitude and acceptance, the skill may help breast cancer patients and survivors learn to adjust to their new normal. Rather than focusing on the past and trying to become the person they were before cancer, mindfulness can help them accept who they are now and who they will become. Furthermore, self-compassion includes a mindful awareness component as well as self-kindness and a sense of common humanity. Thus, research has shown individuals with higher levels of self-compassion are less likely to be self-critical and isolate themselves (Przezdziecki & Sherman, 2016). Such outcomes would be beneficial for breast cancer patients, as less self-criticism in a time of radical bodily changes would certainly be more advantageous than not. Additionally, this paper has discussed the importance of social support in breast cancer treatment, and less isolation is ideal. Thus, self-compassion appears to be a noteworthy skill to include in intervention. However, self-compassion is a relatively new concept, and it has not been explicitly taught (Przezdziecki & Sherman, 2016). In contrast, mindfulness is a well-established intervention, and qualities fostered by mindfulness are thought to be preconditions for the development of self-compassion; mindful awareness of one's inner experiences of suffering is considered an essential step for the development of compassion

toward oneself (Przezdziecki & Sherman, 2016). Nonetheless, mindfulness and self-compassion differ in their respective targets. Mindfulness focuses on the individual's internal experience while self-compassion focuses on oneself as the experiencer. Thus, incorporating both concepts into intervention may be effective as the breast cancer patient/survivor can then recognize their experience and learn how to effectively cope with it.

Przezdziecki and Sherman (2016) discuss the effectiveness of mindfulness as an intervention for body image, tying it into the potential usefulness of self-compassion. Citing research that shows mindfulness is recognized as a protective factor in body image concerns, Przezdziecki & Sherman (2016) go on to discuss how it entails the acceptance of one's appearance at present. Rather than focusing on the achievement of an ideal body or perfection, mindfulness encourages a neutral observation of reality and what the body actually is at this point in time. In this way, the individual does not engage in body avoidance or harsh selfjudgment, and instead embraces and enhances compassionate behavior. However, mindfulness may have its limitations when working with body image. If an individual is prone to misjudgment or becoming highly observant of their body image, research has shown less body acceptance (Przezdziecki & Sherman, 2016). Hence, self-compassion may play a unique role in fostering a sense of care and tenderness toward the self rather than critical observation, even when experiencing difficult thoughts or emotions (such as when dealing with repercussions of breast cancer) (Przezdziecki & Sherman, 2016). Furthermore, Przezdziecki and Sherman (2016) argue that self-compassion may actually be able to offer additional approaches, on top of mindfulness, with regard to breast cancer-related body image disturbance. For example, selfcompassion has been found to be associated with greater cognitive flexibility and an increased ability to adapt to life changes. As breast cancer is an unexpected life event that completely

changes one's life course, a woman must be flexible in order to cope with her changing circumstances and treatment plans. Also, as discussed previously, Przezdziecki et al. (2013) discuss how self-compassion has been associated with less depression, healthy body image, and increased quality of life among cancer patients. To further support the use of self-compassion with body image concerns, Przezdziecki and Sherman (2016) highlight research findings of higher self-compassion being associated with lower body shame, and it appears evidence has grown to support the effectiveness of self-compassion interventions, even if brief. This is an important topic as body image disturbances appear to be widespread, difficult to treat, and resistant to a number of interventions, as according to Przezdziecki and Sherman (2016).

Therefore, Przezdziecki and Sherman (2016) developed a self-compassionate writing intervention for use with breast cancer patients. In the control and experimental condition, participants were to describe an event they had experienced in relation to post-treatment bodily changes that had negatively affected their body image. In the control group, the women were asked to describe the event as detailed as they could and write how they felt and behaved at the time. In the self-compassionate group, women were given prompts designed to induce a self-compassionate perspective. For example, the first prompt had the women consider the changes their body had undergone since treatment and write whether they had treated themselves with kindness. Secondly, the women were asked to write a paragraph showing understanding and kindness for themselves, taking the perspective as if they were addressing a friend who had undergone a similar experience. The next prompt involved looking at the bigger picture; the women were asked to put space between the event and their reactions by adapting a mindful awareness of the situation. Lastly, they were asked to write about how other survivors or women

in general may experience events where they feel uncomfortable about their bodies, and conclude by writing a self-compassionate letter to themselves (Przezdziecki & Sherman, 2016).

Although a novel intervention, Przezdziecki and Sherman (2016) found that the women given the self-compassionate-focused writing prompts displayed less negative affect and greater self-compassionate attitudes. Indeed, the self-compassionate writing activity appeared to service a protective effect against negative affect; the women in this group reported increased thoughts and perspectives associated with a self-compassionate outlook (Przezdziecki & Sherman, 2016). Furthermore, avoidance, disengagement, and self-blame are common problematic coping strategies among breast cancer patients, but directly practicing self-compassion disrupt these unhealthy coping mechanisms and lead to healthier cognitions (Przezdziecki & Sherman, 2016). In light of the results, Przezdziecki and Sherman (2016) posit that the adoption of a selfcompassionate outlook may be useful in treating body image concerns; appearance-related selfcompassion has been found to be linked with healthier body related affect, cognitions, and behaviors. Sherman et al. (2017) reinforce these findings. In their study investigating the roles of self-compassion and appearance investment following nipple-sparing mastectomy with immediate breast reconstruction, Sherman et al. (2017) found self-compassion to moderate the relationship between body image disturbance and associated psychological distress.

It is noteworthy to mention the self-compassion-based writing intervention had similarities with components of ACT, such as mindfulness, acceptance processes, and psychological flexibility (Przezdziecki & Sherman, 2016). Each intervention focuses on the present moment, and this intervention may be useful within the scope of ACT for breast cancer patients dealing with body image distress. As it is a brief intervention, it has the potential to reach a wide range of audiences and can be used to complement existing information in cancer

survivor programs and support groups. Moreover, it suggests evidence for the inclusion of acceptance, self-compassion, and mindfulness aspects of treatment with breast cancer patients and survivors struggling with negative body image. As seen throughout this paper, there are relatively few interventions done to target body image among breast cancer patients, and those that have been done are typically cognitive-behavioral in nature. Thus, widening the scope of treatment and including these components may be applicable to future interventions for breast cancer patients with body image concerns.

More recently, Franco et al. (2019) conducted a mindfulness-based program aimed at improving psychosocial functioning in women who had received a mastectomy. Consistent with previous research, Franco et al. (2019) discuss how the loss of one or both breasts may leave women feeling less attractive and lower their self-esteem. Moreover, changes in their body image may affect their feelings of femininity (Franco et al., 2019). Franco et al. (2019) aimed to utilize a flow meditation to target psychosocial variables such as social avoidance, depression, and self-esteem. The mindfulness training program, also called the flow meditation, was administered to a group of women in 2-hour weekly sessions for 7 weeks (Franco et al., 2019). The program included mindfulness exercises from a previous stress-reduction program as well as mindfulness techniques used in ACT therapy. An experienced instructor facilitated the program, leading each session with discussion and feedback on the mindfulness meditation exercises practiced during the previous week. They then moved on to a 10 minute guided body-scan, presentation of various metaphors and exercises corresponding to each session, and ending with the practice of mindful breathing (flow meditation) for 30 minutes (Franco et al., 2019). Franco et al. (2019) state the main purpose of the flow meditation was to help the participants learn to allow their thoughts to flow without trying to modify them or interfere with them. There was a

follow-up phase of 3 months in which participants were asked to practice body-scan and mindful breathing on a daily basis at home for ten and thirty minutes. Ultimately, Franco et al. (2019) found the flow meditation to be effective in reducing psychosocial symptoms such as depression and social avoidance, and it enhanced resilience and self-esteem as well. Moreover, the improvements were maintained during the 3-month follow-up phase, which Franco et al. (2019) posit is related to more adaptive coping methods. Consequently, this study reinforces the use of mindfulness techniques as adjunct therapy to other physical and psychological treatments of patients with breast cancer, as well as those who have undergone mastectomy (Franco et al., 2019).

# Breast Cancer as a Trauma

At the time of the Classen et al.'s (2001) study, there was a growing recognition that a cancer diagnosis could lead to a traumatic stress response. To further exemplify how breast cancer can cause both physical and mental distress, Classen et al. (2001) conducted an intervention to treat posttraumatic stress symptoms with breast cancer patients. Indeed, they cite that 3 to 19% of breast cancer patients met criteria for posttraumatic stress disorder, with more advanced stages of the disease placing patients at higher risk for emotional distress (Classen et al., 2001). Such findings suggest the potential presence of posttraumatic growth among breast cancer survivors. While research on posttraumatic growth in breast cancer patients and survivors has been limited, several studies have found predictors of posttraumatic growth. Posttraumatic growth has been defined as a perceived positive change following a stressful situation (Quiroga et al., 2018). To elaborate, posttraumatic growth deals with "a positive cognitive remodeling," which results from experiencing a situation that is perceived as stressful and/or traumatic by the individual (Quiroga et al., 2018, p. 302). It involves five aspects: Relating to Others, New

Possibilities, Personal Strength, Spiritual Change, and Appreciation of Life. Such concepts can be evaluated by the Posttraumatic Growth Inventory (PTGI), as was used in the study by Quiroga et al. (2018) to examine predictors of posttraumatic growth among women with breast cancer. Through their study, Quiroga et al. (2018), found rumination and social support to be predictors of posttraumatic growth in women with breast cancer. Although rumination tends to have a negative connotation as it may encourage fixation on negative feelings, it can also be a form of response to stress in which the person fixates on the problem without defining "assertive resolution strategies" (Quiroga et al., 2018, p. 303). In other words, when rumination is deliberate rather than intrusive and brooding, it has been related to posttraumatic growth. For example, when women speak about their experience with others, they can express an understanding and assimilation of the situation in such a way that it facilitates the perception of positive changes following an adverse experience such as breast cancer. Quiroga et al. (2018) assert that such active processing may allow the elaboration of coping strategies.

Furthermore, Romeoet al. (2019) found depressive symptoms and distress during the early stages of breast cancer can act as a "catalyst" for posttraumatic growth (p. 1) This suggests breast cancer patients in the early stages of the disease may benefit from psychological interventions aimed at facilitating posttraumatic growth (Romeo et al., 2019). Indeed, Danhauer et al. (2013) found posttraumatic growth increases the most within the first year following diagnosis, which corresponds to the time when one's assumptions about the world and self are likely the most challenged. Moreover, Danhauer et al. (2013) found several variables to be associated with a greater PTGI score, including: time since diagnosis, baseline level of illness intrusiveness, greater increases in social support, spirituality-meaning and peace, spirituality-faith, use of active-adaptive coping strategies, and mental health. Thus, understanding these

factors and how to foster them will be an important aspect of treatment with breast cancer patients, as it may promote long-term adjustment.

Regardless of posttraumatic growth, Classen et al. (2001) assert that previous interventions have focused on brief interventions with psychoeducation, coping strategies, and emotional support. Classen et al. (2001) set out to create a more holistic intervention in which five themes were included in an emotionally expressive format. Also, Classen et al. (2001) argue that previous research has focused on structured interventions with predetermined topics to be discussed; in their study, they allowed themes of discussion to emerge throughout the duration of the group. The five themes within the material were: fears of death and dying, reordering life priorities, improving support from and communication with family and friends, integrating a changed self and body image, and improving communication with physicians. Even within an intervention aimed at treating posttraumatic symptoms, body image is an important piece of treatment. This reinforces how important it is to take a holistic approach when treating breast cancer patients, as both their body and mind are affected by the disease.

The program started as one year of group therapy with a 90-minute meeting each week. However, as the groups continued, they went on for several years and participants were able to remain the group for as long as they wished. Sessions were facilitated by two mental health professionals, including a psychiatrist, psychologist, or social worker. The goal of Classen et al.'s (2001) program was to create a supportive environment in which participants were encouraged to "confront their problems, strengthen their relationships, and find enhanced meaning in their lives" (p. 495). Throughout the program, Classen et al. (2001) noted how group members became role models for one another and taught each other coping strategies they had found effective for themselves. Furthermore, patients shared psychoeducation among themselves

while the therapists facilitated the discussion, and each session ended with a self-hypnosis exercise to manage stress or deal with pain. Essentially, the authors set out to create a group in which patients could find social support to deal with their diagnoses of breast cancer (Classen et al., 2001).

Although Classen et al. (2001) did not specifically measure body image, they found a significant improvement in posttraumatic stress symptoms among the breast cancer patients. Thus, this author finds it important to recognize how body image has been included within the confines of interventions focused on other aspects of mental health. However, this study provides another example of how few interventions have solely focused on body image. This points to the importance of the future development of interventions focused on body image among breast cancer patients, and supports an unstructured intervention in which patients are able to discuss issues at the forefront of their mind.

#### Partner Empathy and Support

Needless to say, breast cancer is quite prevalent; "Approximately 1.67 million women worldwide are diagnosed with breast cancer each year" (Fang et al., 2015, p. 1815). This prevalence is consistent across cultures, with breast cancer being the most common female cancer in Taiwan as well. Although this author had discussed the increasing number of survivors due to advances in early detection and treatment, Fang et al. (2015) also point out this survival is often accompanied by increased rates of mental health problems. According to Fang et al. (2015), studies have shown 50% of women experience depression or anxiety one year after receiving a breast cancer diagnosis, and 25% of women still report psychiatric difficulties two years later. It has been thoroughly discussed in this paper how breast cancer treatments can affect a woman's body image, whether it be through chemotherapy or radical mastectomy. However,

this author finds it important to also discuss how body image and psychological symptoms, such as depression, are related. For example, Fang et al. (2015) discuss how several studies have found female breast cancer survivors with poor body image were more likely to report depressive symptoms. While some studies find that women experience body image recovery, others may experience a decline in the years following diagnosis and treatment of breast cancer. Thus, understanding what the protective factors for recovering are would be beneficial for clinicians to know so they can help decrease the impact of treatment on changes in body image and related depression (Fang et al., 2015).

Fang et al. (2015) report the experience of body as being related to a person's sense of self, which is therefore essential to one's sense of psychological self. The authors go on to describe body image as "a sense of self that reflects the mental representations of one's body and includes one's thoughts, feelings, and attitudes toward...one's physical appearance" (Fang et al., 2015, p. 1815). For women, the construct of feminine beauty and contemporary body ideals also influence how they evaluate their bodies. Thus, many women are also concerned with how they appear to others as well as themselves, and when they compare their body to the ideal societal standards, it can threaten their sense of self (Fang et al., 2015). This experience may negatively impact a woman's body image, thereby resulting in more depressive symptoms. Therefore, it is not just the breast cancer patients' views that clinicians are dealing with; it is their perceptions of the world around them and the role of society that must be considered as well. Moreover, a woman's partner may be an important part of treatment following breast cancer. Fang et al., (2015) cite studies that have shown how partners provide essential support among women with breast cancer, and the presence of support has been linked to less psychological distress. Indeed, Notari et al. (2015) examined the role of a satisfying romantic relationship on women's body

image after breast cancer and found women who were satisfied with their relationship reported less body image disturbance. Moreover, being married was associated with less body image disturbance 2 weeks post-surgery (Notari et al., 2015).

Therefore, Fang et al. (2015) discuss empathy as a unique component of partner support, noting one study that found women who received highly empathetic responses from their partner was helpful. Empathy may be defined as "the ability to experience, comprehend, and respond to the inner state of another person" (Fang et al., 2015). The authors go on to review several studies that have found women to be concerned with their partners' reactions to their bodies post-surgery. With this in mind, it is not difficult to see why it would be helpful to have the partner involved in therapeutic intervention. If partners are able to adopt the patient's perspective, women may feel more understood and valued (Fang et al., 2015). In turn, perceiving greater empathy from their partner may also decrease the patient's concerns about changes to her body image and related depression.

However, there are some cultural considerations to keep in mind. As was previously mentioned, traditional Chinese culture may influence a woman to hide her feelings and endure poor treatment or lack of support from her spouse to maintain a marriage, as marriage is seen as predestined (Fang et al., 2015). As so much of the culture shapes the relationship, it may be more difficult for Chinese women to perceive empathy from their partners, and they are more vulnerable to mental health problems (Fang et al., 2015). Thus, understanding these social and cultural systems would be beneficial for the clinician to know when developing techniques to help Taiwanese and Chinese women.

Ultimately, Fang et al. (2015) sought to understand the relationship between women's perceptions of empathy from their partners and depressive symptoms and body image. They also

examined if women's perceptions of their partner's empathy moderated the relationship between body image discomfort and depressive symptoms. Through their study, Fang et al. (2015) found that empathy from partners did in fact moderate the impact of women's body image on depressive symptoms. Furthermore, previous studies have shown how constructive communication can play an important role in reducing women's distress, particularly among patients coping with the physical side effects of cancer (Fang et al., 2015). This suggests intervention could focus on building partners' empathetic skills through communication training.

Although Fang et al. (2015) did not find a significant relationship between perceived empathy and body image, the authors speculate it may be due to cultural differences. As discussed, Chinese women tend to hide their feelings, and they may feel uncomfortable openly expressing concerns about their femininity. Furthermore, discussing their partner's empathy and a private issue such as body image may be difficult to express for Chinese women. Therefore, intervention with Chinese women may focus more on improving couples' communication so breast cancer survivors are able to openly discuss their private concerns.

Along the lines of the importance of a partner's role in breast cancer treatment, Favez et al. (2016) examined the influence of attachment avoidance and anxiety on distress and body image disturbance among women with breast cancer. While avoidance refers to the tendency to repress emotional needs as a consequence of a history of rejection from caregivers, anxiety refers to the tendency to feel uncertain and helpless due to a history of inconsistency in caregivers' responses (Favez et al., 2016). Individuals with avoidant or anxious attachment styles have insecure models of attachment and tend to use "secondary" attachment strategies as a defense against negative emotions (Favez et al., 2016, p. 2995. For example, avoidant individuals may attempt to block their emotional states by deactivating, while anxious individuals may

overemphasize their helplessness and force the social environment to provide protection (Favez et al., 2016)Additionally, attachment anxiety has been related to higher dissatisfaction with body image (Favez et al., 2016). Indeed, Favez et al. (2016) found women with insecure attachments reported more body image disturbance and distress from breast cancer. However, social support was again found to be a protective factor, which reinforces the importance of creating a social network in treatment.

On a different note, not only is breast cancer the most common cancer among women in the United States, it is also the number one cancerous disease among women in Korea (Jun et al., 2011). Although the prevalence of breast cancer is increasing, so is the survival rate due to the advancement of medical techniques and adjuvant therapy such as chemotherapy and radiation therapy. According to (Jun et al., 2011), the survival rate after 5 years is 89.0% in the United States, and Korea follows closely behind with a survival rate of 87.3%. Thus, the higher rates of survival highlights the importance of addressing quality of life issues such as body image among breast cancer patients.

### A Sexual Life Reframing Program

Breasts can mean various things to women, but many studies discuss them as a symbol of femininity and beauty. Jun et al. (2011) reports them as being "necessary and fundamental parts of women," and a mastectomy may threaten a woman's perception of her femininity. Furthermore, adjuvant therapy can cause the onset of early menopause, which can be particularly harmful to younger women's sense of femininity, as discussed in a previous section. While many breast cancer survivors report a negative body image (Jun et al., 2011), the loss of the breast(s) and undergoing breast cancer treatment can affect more than the woman herself. For example, there may be changes in marital intimacy due to the changes in a woman's body, whether it is

her own discomfort or if it her partner's. Breast cancer survivors may also feel an overall sense of dissatisfaction with their self-appearance and disruption of their body integrity following treatment (Jun et al., 2011). Indeed, when interviewing this author's mother, she stated she felt that her breasts were no longer private after treatment (C. Cooling, personal communication, 2019). As she had a mastectomy and reconstructive surgery, she reported feeling her "new" breasts were just objects and not personal parts of her body. So many doctors had seen her previous chest throughout treatment leading up to the mastectomy that her body integrity was indeed disrupted.

Therefore, while it is apparent that many breast cancer patients and survivors experience body image disturbances related to the diagnosis and treatment, there is a lack of interventions aimed at alleviating these concerns. Nonetheless, several studies have been done to target body image distress. One of these studies is that by Jun et al. (2011), in which the authors developed a sexual life reframing program designed to examine its effect on martial intimacy, body image, and sexual function. Jun et al. (2011) based their program off of framework that proposed breast cancer treatment influences changes in sexual and physical domains of life as well as relational, psychological, and physiological dimensions of life (i.e., body image, marital intimacy). Thus, breast cancer affects various aspects of life, and body image may be one of the affected factors that leads to distress in other areas. For example, if a woman does not feel comfortable or satisfied with her body, she may be reluctant to engage in sexual intimacy with her partner, which could then influence the status of the relationship.

With the factors mentioned above in mind, Jun et al. (2011) designed a small-group intervention held at a hospital. The program consisted of six weekly 2-hour sessions, and the intervention was delivered to three groups that had up to 10 individuals each. At each session,

refreshments were provided, and \$20 gifts were given upon completion of the program. A certificate of appreciation was also given upon completion. The program was divided into three different types of intervention, each aimed at a different area of life. Intervention for physical aspects of sexual health included educating the patients about the impact of cancer and treatment on sexuality and sexual function, group discussion and counseling about sexual problems and concerns, and the introduction of stretching and massages. On the other hand, psychological intervention included group discussion and counseling, participating in art activities facilitated by a clinical art therapist, and reading poems. Other psychological interventions implemented were viewing movies and pictures related to the experience of other breast cancer survivors and relaxing through abdominal breathing. The last piece of intervention was relational, focusing on martial sexuality and communication skills. Discussion, role play, and watching movies related to marital relationship were used to target these skills. Jun et al. (2011) cites that the contents were verified by an expert panel including a breast surgeon, breast care nurse, clinical art therapist, and women's health nursing professors. Jun et al. (2011) also broke each of the six sessions of the program down by theme: relaxation, perception of problems, exposure, solving problems, acceptance, and reframing. For example, the relaxation session included abdominal breathing and a drawing exercise; perception of problems included discussion of sexual problems; and exposure introduced clay work and how to recognize communication problems. Furthermore, the solving problems session included sharing artwork among breast cancer survivors; acceptance included understanding oneself through a Mandala and discussion of body image; and the reframing session concluded with expression of thoughts and feelings about one's reframed self and body. The last session also included an evaluation of the program.

Overall, Jun et al. (2011) found body image scores at baseline indicated more negative body image than American breast cancer survivors measured by the same instrument. Following the intervention, body image had improved in both the experimental and control groups, but the change was not statistically significant. Jun et al. (2011) speculates this insignificance may be due to several issues, such as the intervention only addressed the participants' body in terms of accepting their own body rather than including how others see them as well. Furthermore, the brief nature of the program may not have been sufficient enough to produce impacting changes on the participants' views of themselves and their inner cognitions regarding their bodies (Jun et al., 2011). Thus, an intervention aimed at body image may require more time to be effective.

### The Role of Religion in Intervention

The author previously mentioned how distress may actually increase following surgical or adjuvant treatment of breast cancer (Matthews, Grunfeld, & Turner, 2017). Relatedly, Jun et al. (2011) emphasize the shift from externalization to internalization of feelings concerning the loss of breast(s). Leading up to this point, the doctors and oncology team have likely kept the patient "running towards the finish line," with the finish line being a mastectomy, lumpectomy, or completion of chemotherapy or radiation therapy. The main concern at that time is getting the patient medically well. However, it may not be until after completion of treatment that psychological distress sets in or increases, as the patient now has time to reflect on their experiences. As clinicians, it is important to keep this timing in mind, as many breast cancer patients may feel "abandoned" upon completion of treatment; just because they are now medically well, does not mean they are psychologically well.

Paiva et al. (2013) cites that breast cancer can affect quality of at various points in the individual's life, including at diagnosis, during treatment, and even after recovery. Although

chemotherapy has improved the survival rate, it also produces various side effects that can affect an individual's quality of life. Thus, identifying coping mechanisms during and after treatment is an essential part of intervention. Among such coping skills may be religion and spirituality for some patients. In (Paiva et al. 2013)'s study, they discuss how cancer patients often use religious and spiritual skills, and religious involvement has been associated with optimism, a sense of meaning and purpose, and a better quality of life. As body image is considered a domain within quality of life, it is important to investigate how it affects individuals. Through their study, (Paiva et al. 2013) found a consistent association of body image acceptance with a higher degree of religious practice, specifically prayer activity. Thus, for patients with religious backgrounds who wish to incorporate their beliefs into their treatment, prayer may be an effective method of coping.

### Meta-Analyses and Cognitive Behavioral Therapy Techniques

It has been mentioned that breast cancer is the most commonly diagnosed cancer in women in the world, with an estimate of one out of every eight women expected to develop breast cancer at some point in their lives (Matthews et al., 2017). However, mortality rates have reportedly dropped in recent decades due to advances in early detection and treatment, leading to an increase in breast cancer survivors. As such, here is an increased need for promoting and supporting a high quality of life in survivors, including optimal psychosocial adjustment. Medically speaking, the primary treatment for breast cancer is surgical. Surgery consists of either a mastectomy or lumpectomy (breast conservation surgery). Matthews et al. (2017) reported approximately one-third of women choose to undergo immediate breast reconstruction following mastectomy, although other research points to a considerable delay between surgery and reconstruction. For example, Teo et al.'s (2016) study included breast cancer patients who waited

an average of three years for breast reconstruction following their mastectomies. Breast cancer does not just affect a woman's physical health, though; the disease often affects psychological health as well. Matthews et al. (2017) reported that breast cancer diagnosis and treatment has been found to be associated with increased rates of anxiety, depression, distress, and reduced quality of life. Specifically, as many as thirty percent of women experience anxiety and depression following breast cancer surgery (Matthews et al., 2017). While many individuals may assume breast cancer patients' distress would decrease after initial treatment, stress-related symptoms may actually increase due to the patients leaving the "safety net" of their oncology team and doctors (Matthews et al., 2017). Moreover, body image issues have been found to be significantly higher following surgery as well.

In their meta-analysis, Matthews et al. (2017) review various types of psychosocial interventions that have been used to treat breast cancer patients. Such interventions include group therapy, individual counseling, psychotherapy, and psychoeducational interventions, with "accumulating evidence" indicating a consistent beneficial effect for breast cancer patients (Matthews et al., 2017). However, Matthews et al. (2017) point out that little is known about which intervention is most effective following breast cancer surgery. Thus, the purpose of their review was to evaluate the efficacy of interventions on a range of psychosocial outcomes following both mastectomy and breast conservation surgery. Regarding body image, they found two studies reported significant treatment effects with cognitive behavioral therapy and support groups, but no significant effect was found for supportive-expressive group therapy. For example, Fadaei et al. (2011) found cognitive behavioral counseling to be effective in improving body image. Overall, cognitive behavioral therapy was the only intervention found to improve

outcomes related to anxiety, depression, and quality of life, which reinforces the idea CBT can be a useful intervention for breast cancer patients and survivors. (Matthews et al., 2017).

In a pilot study of a body image intervention for breast cancer survivors, Lewis-Smith et al. (2018) adapted a cognitive-behavioral therapy-based intervention to promote positive body image. The original intervention, 'Set Your Body Free,' used CBT strategies to address concerns associated with aging-related appearance changes and disordered eating, including themes of body acceptance and self-care (Lewis-Smith et al., 2018). Therefore, the adaptation was called 'Accepting your Body after Cancer,' which was delivered in two groups across seven weekly hour sessions (Lewis-Smith et al., 2018). Groups were facilitated by a clinical psychologist and a peer who had received treatment for breast cancer, and content included topics such as an introduction to body image, exploration of personal goals, and an introduction to CBT. Later sessions focused on stopping negative body-related self-talk, developing alternative thoughts, and understanding the relationship between body function and movement. Topics also included body comparisons, managing others' reactions, physical activity, identifying core beliefs, positive body affirmations, and creating future plans (Lewis-Smith et al., 2018). While the psychologist employed CBT strategies and helped lead activities, the peer led activities that required participants to reflect on their experience, as they could relate to their experiences (Lewis-Smith et al., 2018). Overall, the authors found the intervention was acceptable and feasible for women with breast cancer, and there was a high rate of retention. Lewis-Smith et al. (2018) speculate this was due to the targeted nature of the intervention and its exclusive focus on body image, whereas many interventions focus on general well-being. Moreover, there were significant improvements at post-test and these improvements were sustained at follow-up on the

majority of the body image measures, indicating this intervention has potential to help women deal with body image concerns related to breast cancer (Lewis-Smith et al., 2018).

It is apparent body image concerns warrant attention among women who are currently or who have previously undergone treatment for breast cancer. As has been discussed, there may significant psychosocial, physical health, and interpersonal relationship consequences. Lewis-Smith et al. (2018) systematically reviewed the effectiveness of interventions on body image outcomes, with intentions to inform health care providers and create future directions of research. Thus, it is important to note their findings in this paper as well. Indeed, Lewis-Smith et al., (2018) cite that up to 77% of breast cancer patients experience some degree of body image concern, with little improvement within five years following treatment. Moreover, findings have shown that a poor body image can lead to increased levels of anxiety, depression, sexual and intimacy concerns, and increased risk of mortality (Lewis-Smith et al., 2018).

While Breast Cancer Care, the leading breast cancer charity in the United Kingdom, has called for more support to address body image concerns among breast cancer patients and survivors, Lewis-Smith et al., (2018) state body image supports often target temporary changes. For example, there is a "Look Good, Feel Better" program that delivers skin care and make-up workshops to teach women how to manage eyebrow and eyelash lost from chemotherapy (Lewis-Smith et al., 2018). There is also a "Moving Forward" program that delivers group courses to provide support and information on a variety of issues, but body image is only briefly explored (Lewis-Smith et al., 2018). As such, there is still a need for a more in-depth look into how body image interventions can be more informative and effective. Through their review, Lewis-Smith et al. (2018) found many interventions did not follow up with patients, and there was a lack of theoretically-driven interventions used. Many of the interventions were delivered in

group format, and this format appears to be effective for breast cancer patients as it may enhance cohesion and acceptance. Lewis-Smith et al. (2018) also report a disparity between effective interventions concerning the stage of treatment participants, although they found support for body image can be beneficial at any stage of treatment. Furthermore, there were four interventions Lewis-Smith et al. (2018) considered to be of sound methodological quality, which included a multimodal residential program, a multi-activity exercise program, a strength training program, and a MBSR program. This suggests similar programs may be used in the future to target body image among breast cancer patients and survivors.

Lewis-Smith et al. (2018) offer several recommendations for future practice. First, they recommend the use of empirically supported theory in the development and evaluation of interventions, as theory can help inform targets for intervention that will lead to changes. They also recommend adopting an approach that explicitly and exclusively addresses body image, as Lewis-Smith et al. (2018) state an explicit focus on body image validates women's concerns, which many women report feeling their health professionals do not recognize the impact bodily changes has on their mental health. While physical activity based interventions have shown some promise, psychotherapeutic interventions may attain longer-lasting improvements in body image, and psychological intervention may better accommodate women at different stages of treatment who vary in their physical abilities (Lewis-Smith et al., 2018). Furthermore, the authors recommend psychotherapeutic interventions move beyond a narrow disease-focused approach and consider the interaction between the individual, disease, and wider sociocultural context (Lewis-Smith et al., 2018). Lastly, Lewis-Smith et al. (2018) recommend future studies employ follow-up evaluations and stricter methodology. Overall, effective interventions Lewis-Smith et al. (2018) reviewed consisted of physical activity based, psychoeducational, and

psychotherapeutic approaches, which reinforces the idea intervention is often multimodal. Therefore, the findings from this review merit consideration for future use by health and mental health professionals.

### Conclusions

In sum, this literature review merits several conclusive statements. First, it has been repeated by many authors in the literature that body image needs to be further examined among breast cancer patients and survivors. A better understanding of their unique needs will contribute to more effective, targeted interventions. For example, Teo et al. (2016) posit that a better understanding of body image and quality of life in breast cancer patients undergoing reconstruction is necessary in order to advance psychosocial care. Moreover, timing of reconstruction and intervention may be of importance. According to Teo et al. (2016), patients waiting to undergo delayed reconstruction could benefit from psychological interventions designed to target body image distress. This may particularly apply to patients who wished to have immediate reconstruction, but could not due to other factors such as their treatment plan (i.e., chemotherapy, radiation therapy) or patient-related factors (i.e., obesity, smoking status) (Teo et al., 2016). Teo et al. (2016) also assert that patient education is important in encouraging more realistic expectations. This is reinforced by de Morais et al. (2016), who discuss the need for improvement in communication between doctors and breast cancer patients; creating an environment in which patients can express their concerns and be thoroughly informed is recommended to be a standard part of intervention. Indeed, discussing body image with patients should be as routine as discussing medications with a physician. While physicians can play a part in this, they often do not have time for lengthy discussions concerning such concepts, which is why breast cancer treatment should be collaborative. Psychologists and other mental health

professionals can play an important role in filling this gap. For example, patients should be informed of the potential for greater body image disturbance with more radical surgery, realistic expectations of surgical outcomes, and more, especially if the woman has a choice between a mastectomy or lumpectomy.

Also, social support has been discussed as a crucial aspect of intervention with breast cancer patients. While the availability of social support serves as a protective factor against the effects of treatment on body image, the lack of social support may hinder or negatively affect the patient's body image (or their ability to cope with the changes). Thus, there may be a particular need for psychosocial support during treatment as well as between the mastectomy and reconstruction process if women are waiting for reconstruction (Teo et al., 2016). Furthermore, many patients report feeling abandoned by their team after the initial surgery to remove their cancer. Therefore, it is important mental health professionals understand breast cancer survivors may require support and intervention from the time of diagnosis through survivorship (so long as they are having difficulty coping with their body image or other mental health concerns). This paper discussed how body image can be affected long after treatment ends; for some women, such as my mother, the cancer-related body changes she has experienced still bother her from time to time two years after her mastectomy. Moreover, it is important to consider that intervention with breast cancer patients is likely to differ from one another, as each person's experience with breast cancer is unique. However, the more that is understood about breast cancer patients and survivors' experiences, the more clinicians can understand common presenting problems, what concerns frequently arise (i.e., body image), and at what point of treatment or survivorship intervention is the most helpful.

In terms of special considerations, although the majority of research focuses on nonmetastatic breast cancer, mental health professionals should consider body image concerns when working with patients with metastatic breast cancer as well. Despite their shorter life expectancies, treatment may focus on improving their quality of life, as body image may still be influential on their mental health even in the later stages of the disease. Also, mental health professionals working with younger women with breast cancer should be aware that younger women may require more information, want support figuring out how to manage their work and family life, and how useful visual aids depicting women their age can be. Younger women also tend to report more negative body image than older women, so working with this population is of the utmost importance. Furthermore, it is necessary to stress the importance of cultural competence. The author discussed several cultural considerations when working with breast cancer patients and survivors of different ethnicities and cultures. For example, body image may be a sensitive topic among Chinese women, and they may lack spousal support during treatment. Thus, treatment may focus on interpersonal relationships and creating an environment in which the woman is able to openly express concerns she may have.

Regarding future directions of intervention, it appears self-compassion may be a crucial and important part of intervention when addressing body image among breast cancer patients and survivors. Although more research is necessary, preliminary findings merit looking more into this concept as an effective aspect of psychological intervention. Moreover, mindfulness appears to be an effective aspect of body image-focused treatment as well, and incorporating both selfcompassion and mindfulness into intervention may enhance the patient's body image by helping them to recognize their experience and learn how to effectively cope with it. Rather than trying to get back to who they once were, acceptance and moving forward with who they are and how

they look now, is a crucial part of intervention. Therefore, ACT may be more applicable to this population, although CBT has been the primary treatment modality in recent years. Moving forward, however, clinicians may consider the use of ACT, self-compassion, and mindfulness as part of intervention.

#### References

- Anagnostopoulos, F., & Myrgianni, S. (2009). Body image of Greek breast cancer patients treated with mastectomy or breast conserving surgery. *Journal of Clinical Psychology in Medical Settings*, 16(4), 311-321. doi:10.1007/s10880-009-9176-5
- Brandão, T., Schulz, M. S., & Matos, P. M. (2017). Psychological adjustment after breast cancer: A systematic review of longitudinal studies. *Psycho-Oncology*, 26(7), 917-926. doi:10.1002/pon.4230
- Buki, L. P., Reich, M., & Lehardy, E. N. (2016). 'Our organs have a purpose': Body image acceptance in Latina breast cancer survivors. *Psycho-Oncology*, 25(11), 1337-1342. doi:10.1002/pon.4270
- Cairo Notari, S., Notari, L., Favez, N., Delaloye, J. F., & Ghisletta, P. (2017). The protective effect of a satisfying romantic relationship on women's body image after breast cancer:
  A longitudinal study. *Psycho-Oncology*, 26(6), 836-842. doi:10.1002/pon.4238
- Cash, T. F. (2011). Cognitive-behavioral perspectives on body image. In *Body image: A* handbook of science, practice, and prevention (pp. 39–47). New York, NY: Guilford Press.
- Castonguay, A. L., Wrosch, C., Pila, E., & Sabiston, C. M. (2017). Body-related shame and guilt predict physical activity in breast cancer survivors over time. *Oncology Nursing Forum*, 44(4), 465-475. doi:10.1188/17.ONF.465-475
- Chen, C.-L., Liao, M.-N., Chen, S.-C., Chan, P.-L., & Chen, S.-C. (2012). Body image and its predictors in breast cancer patients receiving surgery. *Cancer Nursing*, 35(5), E10-E16. doi:10.1097/NCC.0b013e3182336f8b

- Chuang, L.-Y., Hsu, Y.-Y., Yin, S.-Y., & Shu, B.-C. (2018). Staring at my body: The experience of body reconstruction in breast cancer long-term survivors. *Cancer Nursing*, 41(3), E56-E61. doi:10.1097/NCC.0000000000000507
- Classen,C., Butler, L.D., Koopman, C., Miller, E., Dimiceli, S., Giese-Davis, J., Fobair, P., Carlson, R., Kraemer, H.C., & Spiegel, D. (2001). Supportive-expressive group therapy and distress in patients with metastatic breast cancer: A randomized clinical intervention trial. *Archives of general psychiatry*. 58. 494-501. doi:10.1001/archpsyc.58.5.494.
- Collins, K. K., Liu, Y., Schootman, M., Aft, R., Yan, Y., Dean, G., ... Jeffe, D. B. (2011).
  Effects of breast cancer surgery and surgical side effects on body image over time. *Breast Cancer Research and Treatment*, 126(1), 167–176. doi:10.1007/s10549-010-1077-7
- Dahl, C. A. F., Reinertsen, K. V., Nesvold, I.-L., Fosså, S. D., & Dahl, A. A. (2010). A study of body image in long-term breast cancer survivors. *Cancer*, *116*(15), 3549-3557. doi:10.1002/cncr.25251
- Danhauer, S. C., Case, L. D., Tedeschi, R., Russell, G., Vishnevsky, T., Triplett, K., ... Avis, N.E. (2013). Predictors of posttraumatic growth in women with breast cancer. *Psycho-Oncology*, 22(12), 2676–2683. doi: 10.1002/pon.3298
- de Morais, F. D., Freitas-Junior, R., Rahal, R. M. S., & Gonzaga, C. M. R. (2016).
  Sociodemographic and clinical factors affecting body image, sexual function and sexual satisfaction in women with breast cancer. *Journal of Clinical Nursing*, 25(11-12), 1557-1565. doi:10.1111/jocn.13125
- Didier, F., Radice, D., Gandini, S., Bedolis, R., Rotmensz, N., Maldifassi, A., ... Petit, J. Y.(2008). Does nipple preservation in mastectomy improve satisfaction with cosmetic

results, psychological adjustment, body image and sexuality? *Breast Cancer Research and Treatment*, *118*(3), 623–633. doi: 10.1007/s10549-008-0238-4

- D'Souza, N., Darmanin, G., & Fedorowicz, Z. (2011). Immediate versus delayed reconstruction following surgery for breast cancer. *Cochrane Database of Systematic Reviews*. doi: 10.1002/14651858.cd008674.pub2
- Fadaei, S., Janighorban, M., Mehrabi, T., Ahmadi, S.A., Mokaryan, F., & Gukizade, A. (2011).
  Effects of cognitive behavioral counseling on body image following mastectomy. *Journal* of Research in Medical Sciences: the official journal of Isfahan University of Medical Sciences, 16(8), 1047-1054. Retrieved from

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3263082/

- Fang, S. Y., Chang, H. T., & Shu, B. C. (2015). The moderating effect of perceived partner empathy on body image and depression among breast cancer survivors. *Psycho-Oncology*, 24(12), 1815-1822. doi:10.1002/pon.3868
- Favez, N., Cairo Notari, S., Charvoz, L., Notari, L., Ghisletta, P., Panes Ruedin, B., & Delaloye, J.-F. (2016). Distress and body image disturbances in women with breast cancer in the immediate postsurgical period: The influence of attachment insecurity. *Journal of Health Psychology*, 21(12), 2994-3003. doi:10.1177/1359105315589802
- Fazzino, T. L., Hunter, R. C., Sporn, N., Christifano, D. N., & Befort, C. A. (2017). Weight fluctuation during adulthood and weight gain since breast cancer diagnosis predict multiple dimensions of body image among rural breast cancer survivors. *Psycho-Oncology*, 26(3), 392-399. doi:10.1002/pon.4035

- Fingeret, M. C., Teo, I., & Epner, D. E. (2014). Managing body image difficulties of adult cancer patients: Lessons from available research. *Cancer*, 120(5), 633-641. doi:10.1002/cncr.28469
- Fobair, P., Stewart, S. L., Chang, S., Donofrio, C., Banks, P. J., & Bloom, J. R. (2006). Body image and sexual problems in young women with breast cancer. *Psycho-Oncology*, 15(7), 579–594. doi: 10.1002/pon.991
- Fox, K. R., & Corbin, C. B. (1989). The physical self-perception profile: Development and preliminary validation. *Journal of Sport and Exercise Psychology*, *11*(4), 408–430. doi:10.1123/jsep.11.4.408Franco, C., Amutio, A., Mañas, I., Sánchez-Sánchez, L. C., & Mateos-Pérez, E. (2019). Improving psychosocial functioning in mastectomized women through a mindfulness-based program: Flow meditation. *International Journal of Stress Management*, *27*(1), 74-81. doi:10.1037/str0000120
- Glassey, R., Hardcastle, S. J., O'Connor, M., Ives, A., & Saunders, C. (2018). Perceived influence of psychological consultation on psychological well-being, body image, and intimacy following bilateral prophylactic mastectomy: A qualitative analysis. *Psycho-Oncology*, 27(2), 633-639. doi:10.1002/pon.4558
- Helms, R. L., Ohea, E. L., & Corso, M. (2008). Body image issues in women with breast cancer. *Psychology, Health & Medicine, 13*(3), 313–325. doi: 10.1080/13548500701405509

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319–340. doi:10.1037/0033-295x.94.3.319Hopwood, P., Fletcher, I., Lee, A., & Ghazal, S. A. (2001). A body image scale for use with cancer patients. *European Journal of Cancer*, 37(2), 189–197. doi: 10.1016/s0959-8049(00)00353-1

- Hormes, J. M., Lytle, L. A., Gross, C. R., Ahmed, R. L., Troxel, A. B., & Schmitz, K. H.
  (2008). The body image and relationships scale: Development and validation of a measure of body image in female breast cancer survivors. *Journal of Clinical Oncology,* 26(8), 1269–1274. doi:10.1200/jco.2007.14.2661Jun, E.-Y., Kim, S., Chang, S.-B., Oh, K., Kang, H. S., & Kang, S. S. (2011). The effect of a sexual life reframing program on marital intimacy, body image, and sexual function among breast cancer survivors. *Cancer Nursing, 34*(2), 142-149. doi:10.1097/NCC.0b013e3181f1ab7a
- Kagee, A., Roomaney, R., & Knoll, N. (2017). Psychosocial predictors of distress and depression among South African breast cancer patients. *Psycho-Oncology*, 27(3), 908-914. doi:10.1002/pon.4589
- Koçan S., & Gürsoy, A. (2016). Body image of women with breast cancer after mastectomy: A qualitative research. *Journal of Breast Health*, 12(4), 145–150. doi: 10.5152/tjbh.2016.2913
- Lewis-Smith, H., Diedrichs, P. C., & Harcourt, D. (2018). A pilot study of a body image intervention for breast cancer survivors. *Body Image*, 27, 21-31. doi:10.1016/j.bodyim.2018.08.006
- Lewis-Smith, H., Diedrichs, P. C., Rumsey, N., & Harcourt, D. (2018). Efficacy of psychosocial and physical activity-based interventions to improve body image among women treated for breast cancer: A systematic review. *Psycho-Oncology*. doi:10.1002/pon.4870
- Lindwall, L., & Bergbom, I. (2009). The altered body after breast cancer surgery. *International Journal of Qualitative Studies on Health and Well-being*, 4(4), 280-287.
  doi:10.3109/17482620903106645

- Matthews, H., Grunfeld, E. A., & Turner, A. (2017). The efficacy of interventions to improve psychosocial outcomes following surgical treatment for breast cancer: A systematic review and meta-analysis. *Psycho-Oncology*, 26(5), 593-607. doi:10.1002/pon.4199
- McClelland, S. I., Holland, K. J., & Griggs, J. J. (2015). Quality of life and metastatic breast cancer: The role of body image, disease site, and time since diagnosis. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care & Rehabilitation, 24*(12), 2939-2943. doi:10.1007/s11136-015-1034-3
- Moreira, H., & Canavarro, M. C. (2010). A longitudinal study about the body image and psychosocial adjustment of breast cancer patients during the course of the disease. *European Journal of Oncology Nursing*, 14(4), 263–270.
  doi:10.1016/j.ejon.2010.04.001
- Paiva, C. E., Paiva, B. S. R., de Castro, R. A., de Pádua Souza, C., de Paiva Maia, Y. C., Ayres, J. A., & Michelin, O. C. (2013). A pilot study addressing the impact of religious practice on quality of life of breast cancer patients during chemotherapy. *Journal of Religion and Health*, 52(1), 184-193. doi:10.1007/s10943-011-9468-6
- Przezdziecki, A., & Sherman, K. A. (2016). Modifying affective and cognitive responses regarding body image difficulties in breast cancer survivors using a self-compassionbased writing intervention. *Mindfulness*, 7(5), 1142-1155. doi:10.1007/s12671-016-0557-1
- Przezdziecki, A., Sherman, K. A., Baillie, A., Taylor, A., Foley, E., & Stalgis-Bilinski, K. (2013). My changed body: Breast cancer, body image, distress and selfcompassion. *Psycho-Oncology*, 22(8), 1872-1879. doi:10.1002/pon.3230

- Raggio, G. A., Butryn, M. L., Arigo, D., Mikorski, R., & Palmer, S. C. (2014). Prevalence and correlates of sexual morbidity in long-term breast cancer survivors. *Psychology & Health, 29*(6), 632–650. doi:10.1080/08870446.2013.879136Recio-Saucedo, A., Gilbert, A. W., Gerty, S., Cutress, R. I., Eccles, D., & Foster, C. (2018). 'It's like we don't exist': Tailoring education for young women undergoing surgery for early-stage breast cancer. *Oncology Nursing Forum, 45*(2), 165-175. doi:10.1188/18.ONF.165-175
- Romeo, A., Tella, M. D., Ghiggia, A., Tesio, V., Torta, R., & Castelli, L. (2019). Posttraumatic growth in breast cancer survivors: Are depressive symptoms really negative predictors?
   *Psychological Trauma: Theory, Research, Practice, and Policy*. Advanced online publication. doi: 10.1037/tra0000508
- Recio-Saucedo, A., Gilbert, A. W., Gerty, S., Cutress, R. I., Eccles, D., & Foster, C. (2018). 'It's like we don't exist': Tailoring education for young women undergoing surgery for early-stage breast cancer. *Oncology Nursing Forum*, 45(2), 165-175. doi:10.1188/18.ONF.165-175
- Rosenberg, S. M., Tamimi, R. M., Gelber, S., Ruddy, K. J., Kereakoglow, S., Borges, V. F., . . . Partridge, A. H. (2013). Body image in recently diagnosed young women with early breast cancer. *Psycho-Oncology*, 22(8), 1849-1855. doi:10.1002/pon.3221
- Sherman, K. A., Woon, S., French, J., & Elder, E. (2017). Body image and psychological distress in nipple-sparing mastectomy: The roles of self-compassion and appearance investment. *Psycho-Oncology*, 26(3), 337-345. doi:10.1002/pon.4138
- Teo, I., Reece, G. P., Christie, I. C., Guindani, M., Markey, M. K., Heinberg, L. J., . . . Fingeret,M. C. (2016). Body image and quality of life of breast cancer patients: Influence of

timing and stage of breast reconstruction. *Psycho-Oncology*, 25(9), 1106-1112. doi:10.1002/pon.3952

- Teo, I., Reece, G. P., Huang, S. C., Mahajan, K., Andon, J., Khanal, P., . . . Fingeret, M. C. (2017). Body image dissatisfaction in patients undergoing breast reconstruction:
  Examining the roles of breast symmetry and appearance investment. *Psycho-Oncology*, 27(3), 857-863. doi:10.1002/pon.4586
- Villanova Quiroga, C., Fritzen Binfaré, L., Rudnicki, T., & Iracema de Lima Argimon, I.
  (2018). Rumination and social support as predictors of posttraumatic growth in women with breast cancer: A systematic review. *Psicooncología*, 15(2), 301–314. doi.org/10.5209/PSIC.61437

Appendix A: Resources and Summary Lists

## Predictors of psychosocial adjustment:

- 1. Perceived body image
- 2. Appearance satisfaction
- 3. Self-consciousness
- 4. Self-evaluation salience (beliefs about how one's appearance influences their self-worth)
- 5. Efforts to be or feel attractive

## Predictors of post-traumatic growth:

- 1. Social support
- Rumination (positively cancer-related; active processing; elaboration of coping strategies)
- 3. Time since diagnosis
- 4. Baseline illness intrusiveness
- 5. Increases in social support
- 6. Spirituality
- 7. Use of active–adaptive coping strategies

## Important information for mental health professionals and other professionals working

## with breast cancer patients:

- 1. Provide the patient with sufficient information to make an informed decision
  - a. The patient should be aware of risks involved in the various choices offered and understand how treatment will correspond to their personal values
- 2. Young women prefer more information regarding:
  - a. sexuality

- b. the impact of treatment on body image
- c. more information on what breast cancer is
- d. options for treatment
- e. their diagnosis
- f. statistics and figures about their type of tumor and survival
- g. visual materials showing women in their age group
- 3. Young women also prefer to participate in treatment decisions to their desired level
  - a. i.e., leaving the decision up to their surgeons or sharing the decision-making
- 4. Keep in mind certain aspects of treatment are more relevant to younger women:
  - a. How treatment may affect professional life and family planning
  - Radiation and chemotherapy sessions are more likely to affect family and working life
- As patients' first contact is not typically with psychologists, physicians and the oncology team members may learn patient-centered approaches to challenging conversations (i.e., body image)
- Clinicians and professionals may proactively inquire about body image concerns, as patients may be embarrassed or shy to bring it up
- Social support, particular a romantic partner, plays an important role in the treatment process of breast cancer patients
- 8. Mental health providers may fill the role of providing information about how surgery has potential to affect their mental health and body image
- 9. Mental health providers may also provide resources and space to voice their concerns
  - a. Collaborate with physicians and the oncology team to meet individual needs

# **Evidence-based interventions currently used for breast cancer patients:**

- 1. Cognitive-behavioral therapy (CBT)
- 2. Acceptance and commitment therapy (ACT)
- 3. Self-compassion
- 4. Mindfulness

# Helpful resources:

https://www.cancercare.org/diagnosis/breast\_cancer

https://www.cancercenter.com/

https://www.nationalbreastcancer.org/