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Factors Influencing African American Women to Undergo/Forego Reconstruction after Mastectomy

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Walden University

College of Health Sciences

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Senetta Hunt

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2017

Abstract

Factors Influencing African American Women to Undergo/Forego Reconstruction after
Mastectomy

by

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MBA, Saint Leo University, 2012

BA, Saint Leo University, 2011

BS, Saint Leo University, 2010

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Care of Administration

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November 2017

Abstract

The factors associated with the decision of African American women to undergo/forego breast reconstruction after mastectomy has not been well researched. The purpose of this quantitative, correlational study was to determine the extent to which certain factors (age, religion, confidence level, and education) were associated with the decision to forego or undergo breast reconstruction after mastectomy among African American women. Using the social-cognitive theory as the framework, the study focused on the decision-making process regarding breast reconstruction after mastectomy among African American women in Florida. The research questions for this study were to determine to what extent age, religion, confidence level, and education are associated with the decision of African American women to forego or undergo breast reconstruction after mastectomy. Data were collected using the Decision Self-efficacy and Religious Coping Activities scales from 88 African American women living in North Central Florida who had a mastectomy. Data were analyzed using Chi-square test and logistic regression. The results showed a significant relationship ($p = .042$) between the confidence level of decision-making and the decision to forego or undergo breast reconstruction after mastectomy. It was important to examine the extent to which certain factors contributed to decision-making about breast reconstruction after mastectomy in African American women as this can provide an opportunity to cultivate positive social change by being able to tailor support services for African American women after mastectomy based on the role various factors may play.

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Dedication

I will like to dedicate this dissertation to my awesome parents, Booker T. Hunt Sr. and Gwendolyn Hunt for praying each night to accomplish my goals to be successful with my research. Special love and thanks to my children Simone Durden, Melvin Durden Jr., Cory Durden, and Timera Coleman for never giving up and cheering me on to success.

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Chapter 1: Introduction to the Study

Introduction

Breast reconstruction after mastectomy is a major consideration for breast cancer care (Platt, Baxter, & Zhong, 2011). If breast reconstruction is carried out during mastectomy then there is a likelihood of achieving high patient satisfaction and psychological well-being with the reconstruction usually having a positive impact on women's sexuality, body image, and social well-being (Héquet et al., 2013). There have been concerns that post mastectomy breast reconstruction might not restore the social confidence in women, especially in African Americans (Alderman et al., 2011). Factors such as religion, age, self-confidence, and education among the African American women have been found to influence the decision to undergo or forego post mastectomy breast reconstruction (Agarwal et al., 2012). I attempted to establish the validity of this study as well as evaluated the extent to which the aforementioned factors could affect confidence of African American women in decision making about breast reconstruction (Héquet et al., 2013).

This study was needed because the extent to which factors such as religion, age, self-confidence, and education are associated with the decision of African American women to undergo/forego breast reconstruction after mastectomy has not been well researched. This study provides new information for surgeons, physicians, health care practitioners, and cancer patients. Information from this study provides an opportunity to cultivate positive

social change by being able to tailor support services for African American women after mastectomy based on the role factors such as religion, age, self-confidence, and education.

Chapter 1 includes a discussion about the problem, purpose, and nature of the study, as well as the research questions/hypotheses and theoretical framework for this study. Definitions for the study, assumptions and limitations of the study, and the significance of the study are also included in this chapter.

Background

Research suggests that women who delay breast reconstruction after mastectomy do so because they are unsure about surgeries, outcomes, and complications (Alderman et al., 2011). Providing more information to these women could increase their knowledge and guide decisions about various options in breast reconstruction. McGee, Durham, Tse, and Millikan (2011) suggested that timeliness can play an important part in increased use of breast reconstruction after mastectomy. In addition, research studies by Onega et al. (2014) explored factors such as insurance, place of service, and residency to help understand ethnic disparities that are contributing to women delaying breast reconstruction after mastectomy. Other factors that contribute to delays include language and information barriers, particularly among underserved and uninsured population (Wolfswinkel et al., 2013).

In a recent study, Johnston, Blake, Andes, Chien, and Adam (2014) addressed challenges that caused African American women to decline breast reconstruction after single and double mastectomies. African American women are less likely than Caucasian women to choose and undergo breast reconstruction after mastectomy because of cultural

backgrounds and ethnic inequities (Rubin et al., 2013). Moreover, Brennan and Spillane (2013) highlighted that some women's decision to delay breast reconstruction after mastectomy can fluctuate with multifactorial reasons. Some of the reasons for delay among African American women include lack of confidence with practitioners that provide counseling, assistance with understanding, and knowledge of expectations as well as outcomes with breast reconstruction after mastectomy (Sisco et al., 2012). This study was needed to address a gap in knowledge, which currently exists, about the extent to which factors such as religion, age, and education, and self-confidence level are associated with an African American women's decision to forego/undergo breast reconstruction after mastectomy.

Problem Statement

The Centers for Disease Control and Prevention (2014) stated, "Breast cancer is the most commonly diagnosed cancer among women" (para. 1). Breast reconstruction after mastectomy is an option for women with breast cancer (Alderman et al., 2011). Science has improved new techniques for breast reconstruction for individuals who have had mastectomies which can improve emotional wellbeing (Wolfswinkel et al., 2013). Research has also shown that breast reconstruction is a safe alternative for some women after having experienced a mastectomy (Brennan & Spillane, 2013).

Breast reconstruction also provides an opportunity for women to improve their self-appearance after having a mastectomy (Onega et al., 2014). Options for breast reconstruction are offered to individuals that have had mastectomies; however, a study

indicated several reasons why African American women declined having breast reconstruction (Johnston, Blake, Andres, Chien, & Adam, 2014). The study described women who had concerns about having additional surgery, certain health insurance not covering cosmetic surgery, and finding a plastic surgeon.

A study conducted by Rubin, Chavez, Alderman, and Pusic (2013) discovered that factors such as culture, age, and education delayed African-American women's decision to perform breast reconstruction after mastectomy. Another study by Salsky et al. (2014) emphasized the need to recognize the culture preference influencing decisions about breast reconstruction after mastectomy. Researchers have investigated factors that may contribute to a woman's decision to have, or not have, breast reconstruction after mastectomy but no studies have explored the extent to which factors as religion, age, education, and self-confidence level are associated with the decision of African American women to have, or not have, breast reconstruction after mastectomy.

Literature is available for breast reconstruction after mastectomy; however, studies have determined that African American women are delaying any type of breast reconstruction (Onega et al., 2014; McGee et al. 2013). A study conducted by Wolfswinkel et al. (2013) discovered that some African American women lack awareness about various breast surgeries, possibly due to language and information barriers, which can lead to lack of self-confidence about decision making to forego breast reconstruction. Sisco et al. (2012) suggested some African American women have little credence with health providers offering plastic surgery referrals which may cause African American women not to proceed

to breast reconstruction after mastectomy. McGee, Durham, Tse, and Millikan (2013) emphasized that African American women received little assistance from the cancer treatment staff in making decisions. After a consultation with the plastic surgeon about breast reconstruction after mastectomy, African American women experienced lack of knowledge and minimum information explaining the details about the expectancy for the procedures (Sisco et al., 2013). This research may fill the gap about the extent to which factors such as religion, age, and education, and self-confidence level are associated with an African American women's decision to forego/undergo breast reconstruction after mastectomy.

Purpose of the Study

The purpose of this cross-sectional quantitative correlational study was to determine: (a) the extent to which age, religion, and education are associated with the decision to forego or undergo breast reconstruction after mastectomy and (b) the relationship between the level of confidence of decision making and decision to forego or undergo breast reconstruction after mastectomy among African American women in Florida. The independent variables were age, religion, confidence level, and education. The dependent variable was the decision to forego/undergo breast reconstruction after mastectomy.

Research Questions

RQ1: Quantitative: For African American women, to what extent are age, religion, and education associated with the decision to forego or undergo breast reconstruction after mastectomy?

H_01 : For African American women, there is no association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy?

H_11 : For African American women, there is an association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy?

RQ2: Quantitative: For African American women, is there a relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

H_02 For African American women, there is no relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

H_2 : For African American women, there is a relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

Theoretical Framework for the Study

The theoretical framework that I used for this study was the social-cognitive theory SCT. Albert Bandura created the SCT as a psychological technique to delineate intellectual behavior that influences individuals and the environment (Bandura, 1986). The theory states that people perceive and respond to their environment according to what they observed from other people. The SCT explains why when some receive an award; others around them tend

to behave in the same manner to receive the same award. (Bandura, 1977).The theory takes into account the individual's past experiences which determines whether a behavioral action will occur again in future or not (Fadai et al., 2011).The application of SCT is crucial in addressing issues such as individual satisfaction, body image, and eminence of life changes during breast reconstruction decisions (Fingeret, Nipomnick, Crosby, & Reece, 2012). I used SCT to understand how individuals' mind-set and cultural background affects their decision making and to determine to what extent variables such as age, religion, education, and level of self-confidence impact African American women's behavior and actions in making decisions about breast reconstruction after mastectomy.

Nature of the Study

The nature of this study was quantitative. I used the quantitative approach to test the relationships between variables, examine, and interpret the outcome of the study. The purpose of using a cross-sectional quantitative correlational study was to investigate if there was an association between certain variables (age, religion, education, and self-confidence) and the decision by African American women to undergo or forego breast reconstruction after mastectomy. I gathered data using the Decision Self-efficacy Scale (O'Connor, 1995) and questions from the Religious Coping Activities Scale (Pargament, Feuille, & Burdzy, 2011). . The sampling was purposive sampling of African American women from North Central Florida that have had a mastectomy. In this study, I assessed the self-confidence level some African American women have in making decisions about breast reconstruction after mastectomy and the extent to which factors such as age, religion, and education

influenced their decisions. The independent variables were age, religion, confidence level, and education. The dependent variable was the decision to undergo/forego breast reconstruction after mastectomy. The data were analyzed using Chi-square test and logistic regression.

Definition of Terms

Breast cancer: invasive neoplasm in the breast (Venes et al., 2001)

Breast Reconstruction: This is a surgery to replace an absent breast that was invaded by malignant neoplasm from cancer (Pittet, Montandon, & Pittet, 2005)

Confidence Level: a measure of the reliability of a result. A confidence level of 95 per cent or 0.95 means that there is a probability of at least 95 per cent that the result is reliable (Collins English Dictionary, n.d.)

Education: the action or process of educating or being educated (Merriam-Webster's collegiate dictionary, 2004)

Mastectomy: Surgical removal of the entire breast (Venes, Thomas, & Taber, 2001).

Modified Radical Mastectomy: surgical removal of the breast which involves areola, nipple, tissue, and some of the skin, however, the surgeon does not remove the pectoral muscle (Stedman's Medical Dictionary, 2015).

Partial Mastectomy: The surgeon removes breast tissue where cancer cells have invaded in the breast (Stedman's Medical Dictionary, 2015)

Radical Mastectomy: surgical removal of the breast which involves areola, nipple, tissue, and some of the skin, however, the surgeon does remove the pectoral muscle (Stedman's Medical Dictionary, 2015).

Simple or Total Mastectomy: surgical removal of the entire breast, areola, nipple, and some skin (Stedman's Medical Dictionary, 2015).

Subcutaneous Mastectomy: surgical removal of breast tissues, however, leaving the nipple, areola, and some skin in place (Stedman's Medical Dictionary, 2015).

Assumptions

I assumed I would be able to recruit enough participants that were agreeable to completing the survey about breast reconstruction after mastectomy. It was important to obtain enough participants that had had mastectomies to validate the study. I assumed, as a breast cancer survivor and someone who experienced breast reconstruction after mastectomy, that participants show the desire to complete the survey. Another assumption was that participants had an open-mind and were honest about information regarding their confidence level with breast reconstruction after mastectomy. Finally, I assumed that the instruments that I used for the study were reliable and valid.

Scope and Delimitations

The scope for this research study was solely on African American women who had undergone or foregone breast reconstruction after mastectomy and the role that selected factors (age, religion, self-confidence, and education) played in their decision-making process related to breast reconstruction. I chose this population of women because various

studies have determined that African American women are less probable to undergo breast reconstruction after mastectomy than Caucasian women (Rubin et al., 2013; Enewold et al. 2014). Based on my literature review, it appeared that African American women had the lowest rate of breast reconstruction after mastectomy; therefore, I believed this population could benefit from my research.

This study provided insight about the role that age, education, confidence level, and religion played in the decision-making process related to breast reconstruction after mastectomy. Another delimitation of the study was that it was conducted in the North central Florida location. The information gathered from the study is only generalizable to African American women living in North Central Florida. Different populations in other locations may have different attitudes, resources, and options surrounding breast reconstruction after mastectomy.

Limitations

One limitation of this study is that the data collected may not be generalizable beyond the subpopulation. The study population was limited to African American women that experienced mastectomies without yet having breast reconstruction. Findings may vary in other parts of the United States. Gender was limited to women and not men that experienced mastectomies after being diagnosed with breast cancer. There may be gender-related differences in the factors being investigated. It was also possible that the participants were not straightforward about some of the questions in the study. Being a survivor of breast cancer and breast reconstruction, my thoughts on this topic may be biased. However,

using established questionnaires and interpreting information can limit the amount of bias in the research (Pargament, Feuille, & Burdzy; O'Connor, 1995).. To establish honesty with the participants during the study, it was vital to initiate excellent rapport when collecting the data.

Significance of the Study

This research made an original contribution and added knowledge to the existing body of literature because it explored an under researched area of the extent to which certain factors (age, religion, education, and level of self-confidence) can be associated with African American women's decision to undergo/forego breast reconstruction after mastectomy. The significance of this study was that it sheds light on awareness, concerns, and options available that can affect an African American woman's decision to forego or undergo breast reconstruction after mastectomy.

This research can also support professional practice by informing surgeons and physicians about why some African American women choose not to have breast reconstruction after mastectomy. Practitioners can utilize this information to provide guidance for some African American women in helping them to decide about breast reconstruction after mastectomy. This study can inform practitioners about the proper patient education needed for some African American women concerning breast reconstruction after mastectomy. For example, practitioners can provide a video presentation explaining various breast reconstruction options, pre- and post-surgery information, possible complications, the healing process, and family support.

This study can also be valuable in assessing the level of confidence in some African American women's decisions about breast reconstruction after mastectomy. It was important to examine the extent to which certain factors contribute to decision-making about breast reconstruction after mastectomy as this could cultivate positive social change helping doctors tailor support services for African American women after mastectomy. The findings of this study have the potential to create positive social change for African American women. These positive changes may include improvements in self-esteem which in turn could invigorate these individuals to be more active and productive in their communities.

Summary

The results of this cross-sectional quantitative study could be useful to practitioners to determine the extent to which age, religion, education, and confidence level play a part in decision-making by African American women to forego or undergo breast reconstruction after mastectomy. Chapter 2 includes a discussion of recent literature related to age, education, religion, self-confidence level, and decision-making about breast reconstruction after mastectomy.

Chapter 2: Literature Review

Introduction

African American women have the highest death rate from breast cancer in 2011 among all cultures (Center for Disease Control and Prevention 2014). Mastectomy can be used in the treatment of breast cancer and is defined as removal of the entire breast (Shippee, Kozhimanni, Rowna, & Virnig, 2013). The American Cancer Society (2014) noted that there are other distinctive types of mastectomy: simple, modified radical, radical, and partial. Wolfswinkel et al. (2013) found that mastectomy is performed for various reasons such as tumor size, abnormal cells, avoiding radiation, and positive genetic testing for genes linked to breast cancer occurrence. The National Health Information Center (2014) determined unilateral mastectomy increased from 5.4 % in 1988 to 30% percent by 2011 and bilateral mastectomy increased from 2% in 1988 to 11% by 2011. Over the years, unilateral and bilateral mastectomy has increased because of breast reconstruction choices and awareness that health insurance covers patients that experienced breast cancer (Nguyen & Chang, 2013).

Gart et al. (2012) emphasized that surgeons offer a variety of breast reconstruction options to women with breast cancer who had mastectomy. Connors et al. (2015) determined that in women who experienced mastectomy, breast reconstruction was an imperative element of completing a breast cancer regimen. Saha et al. (2013) suggested that patients rely on their surgeon to provide breast reconstruction options, communication, and risk factors that can occur after surgery.

The purpose of this study was to determine: (a) the extent at which age, religion, and education are associated with the decision to forego or undergo breast reconstruction after mastectomy; and (b) the relationship between the level of confidence of decision making and decision to forego or undergo breast reconstruction after mastectomy among African American women in North Central Florida. The findings from this study may help practitioners understand more about the confidence level of African American women's decisions about breast reconstruction after mastectomy. The findings from this study could assist surgeons, oncologists, and health provider's in encouraging African American women to consider breast reconstruction after mastectomy

Literature Search Strategy

I completed an in depth literature review using the Walden University library database which included ScienceDirect, Google Scholar, Medline, CINAHL, PubMed, PsycINFO, EBSCO, and Thoreau. I retrieved current publications that related to previous research studies on breast reconstruction after mastectomy used these databases and conducted a wide search from several databases and retrieved hundreds of peer-review articles and limited the search with key words in the search field. However, for more recent articles on the topic it was important to exploit articles with specific key words to obtain accurate information on factors associated with the decision of African American Women to undergo or forego breast reconstruction after mastectomy. The literature search was conducted for the years 2011 to the present however, older articles, dating back to 1985 were then also reviewed in effort to develop a historical context for the topic of study. All

articles were limited to the English version of the research. I especially focused on issues that related to African American women delaying breast reconstruction after mastectomy to assist in answering the research questions.

The important key words used to search for literature included *African American, black women, female, women, breast cancer, breast reconstruction, delay, delayed, delaying, opted, prolong, mastectomy, breast, age or ethnic, culture, religion, impact, influence, effect, decision, decided, decision-making, assurance, confidence self-confidence, self-efficacy, body image, and reconstructed*. There were various limitations on key words used to find information on the topic of study, which required the assistance from a librarian at Walden University. However, the librarian provided more specific key terms on the topic which resulted in over hundreds of articles to review on the research. This provided an opportunity to narrow the search down to 120 articles that related to this study. Various studies examined factors delaying African American women's decision to perform breast reconstruction after mastectomy; however, there was a gap in the literature regarding the extent to which age, religion, education, and confidence level was associated with the decision of African American women to forego or undergo breast reconstruction after mastectomy.

Theoretical Foundation

The theoretical framework for this study included the social-cognitive theory (SCT), which researchers use to understand an individual's reactions and behavior (Bandura, 1977).. I decided to use (SCT) because it is used examine to participants' behaviors

surrounding decision making. The SCT was postulated by Albert Bandura, who invented the cognitive model related to the behavior and thinking process of human beings (Denier, Wolters, & Benzon, 2013). The SCT relates to the reciprocal determinism which recognizes individual's behavior that involves with personal characteristics, behavioral, and environment (Bandura, 1977). The theory plays a major role in an individual's reaction and beliefs involving decision making. The SCT is also one of the sociological theories that affect the decision-making process among a group of people in society (Bandura, 1985). The theory states that individuals can acquire knowledge by observing others (Bandura, 1985).

Following are three main aspects of SCT:

- *Personality characteristics* are an individual's thinking process, emotional, self-awareness, and confidence that assist in shaping the individual's behavior (Bandura, 1991).
- *Environmental aspects* 1991). *Environmental aspects* relates to an individual's surrounding which determines the reaction of the behavior (Bandura, 1991).
- *Behavior* relates to an individual that is inspired by the continuing performance of self-influence (Bandura, 1991).

Amsellem et al. (2011) conducted a survey among 840 women diagnosed with breast cancer to elicit information about the psychosocial influences on decisions to undergo breast reconstruction surgery using an instrument based on the SCT (Amsellem et al., 2011). In this study the researchers found that physical appearance and body image primarily influenced up to 70% of women to decide for reconstruction with only at most 7.3% citing financial concerns or others' opinions. Women who opted against reconstruction cited side effects, concerns about the procedure, and fear of recurring cancer, but not sexuality or body image, as major decisional influences (Amsellem et al., 2011). These findings reflect how body image and physical appearance seems to influence the decision to undergo reconstruction surgery, however, they do not appear to have the same influence when choosing to forego reconstruction.

Resources may affect self-efficacy, however, Zycinska (2015) found that self-efficacy predicted women's intent to have reconstruction except in the subgroup of women who had fewer resources, namely those who were older, concurrently depressed, and had breast cancer longer. Women who were still contemplating reconstruction considered both physical appearance and side effects, when making their decision to undergo or forego reconstruction. Also, it appears that women contemplating reconstruction spoke with their peers and other women who have previously made a decision on reconstruction surgery and was influenced by their experiences (Amsellem et al., 2011) demonstrating that the environment was also a component of decision-making.

Mastectomy is the removal of all or part of the breast (Shippe et al., 2014) and is a common procedure in the treatment of breast cancer (Agarwal, Agarwal, Pappas & Neumayer, 2012). After the operation, women are faced with the difficult decision as to whether they should do immediate or no breast reconstruction after mastectomies (Sisco et al., 2011). It has been established that certain decisions are significantly influenced by individual decisions in addition to the environment in which one lives (Bandura, 1991). In some decisions, a person's mindset can be shaped by observed behavior (McAlister, Perry, & Parcel, 2008). While there are many options for women to choose from as far as breast reconstruction is concerned, their choices are usually influenced by the choices made by other women around them regarding the issue (McAlister et al., 2008).

It has been observed that more women opted for breast reconstruction than ever before (McAlister et al., 2008). The average African American woman is likely to opt for breast reconstruction surgery because other women around them have been doing the same (McAlister et al., 2008). African American women therefore use their beliefs, including what they know and that which they observe, to choose the right breast reconstruction option for them after mastectomy (McAlister et al., 2008).

Women choosing to exert greater effort in order to enact a behavior is reflective of their self-confidence (Zycinska, 2015). In the context of deciding to have or not to have breast reconstruction, strong self-efficacy is related to women's beliefs about and self-confidence in their ability to undergo the surgery despite the associated difficulties (Zycinska, 2015). However, whether the relationship between self-efficacy, confidence level, and actual

enactment of the decision can be generalized to an ethnic minority population, namely African American women, is not known. This gap in knowledge of the generalizability of the SCT also begs the question of whether other demographic characteristics aside from ethnicity, specifically age, religion, and education, influence African American women's choices to undergo or forego reconstruction.

Anatomy of Mastectomy

To understand the various reasons about why mastectomy is performed in certain stages of breast cancer treatment, it is important to understand the different types of mastectomy procedures. Mastectomy includes surgically removing cancerous breast tissue. Approximately 37% from 2000 to 2006, American women undergo mastectomies to battle various breast cancers (Shippee et al., 2014). Kinoshita et al. (2014) noted that one-third of breast cancer patients are having mastectomies, the type of which is determined by the size of the tumor that has affected the breast.

Types of Mastectomies

The American Cancer Society (2014) stated, "There are four types of mastectomies procedures that are used to remove cancerous tissue that has invaded the breast" (para. 1):

- **Simple or Total Mastectomy:** This procedure involves the entire breast and nipple being removed excluding the lymph node and muscles that are directly underneath the breast (American Cancer Society, 2014).

- **Modified Radical Mastectomy:** This is a general procedure involved with removing the whole breast, skin, and lymph nodes that are located in the axillary region (American Cancer Society, 2014).
- **Radical Mastectomy:** This is a surgical procedure to remove the entire breast, lymph nodes, and chest muscles when cancer cells have invaded into other regions of the breast (American Cancer Society, 2014).
- **Partial Mastectomy:** In this procedure the breast tissue is examined to determine the amount of cancer cells and tissue to remove from the breast (American Cancer Society, 2014).

Breast Reconstruction

Bostwick (1995) discovered reconstructive options were available for women that had a lumpectomy, mastectomy, and deformities after removal of breast cancer. Breast reconstruction is an essential part of recovering for some women who have sustained breast cancer and experienced scars after having mastectomies (Sinno et al., 2013). Breast reconstruction can enhance the contentment and mental status of those who have undergone any type of mastectomy (Sisco et al., 2012). Breast reconstruction can be revisited various times in a breast cancer survivor's life to rebuild absent breast tissue (Alderman et al., 2011). According to Agarwal, Agarwal, Pappas, and Neumayer (2012), mastectomy can have a negative impact on body appearance and sexual role. Individuals that undergo breast reconstruction after mastectomy can choose autologous reconstruction, implants, or both to replace the absent breast (Nelson, Nelson, Tchou, Serletti, & Wu, 2012).

Autologous reconstruction is when a patient uses her own body tissue and muscle in various locations to create a breast mound where the mastectomy was performed to remove breast cancer (Gart et al., 2013). Holland, Archer, and Montague (2014) noted that patients can choose between saline or silicone implants to replace the breast that was removed due to breast cancer. The implants are inserted underneath the chest muscle to replace the absent breast (Holland, Archer, & Montague, 2014). The reason some women undergo breast reconstruction is to reinstitute the appearance of the removed breast for body image and feminineness (Sinno et al., 2013). Sheppee, Kozhimannil, Rowan, and Virnig (2014) noted that individuals who had breast reconstruction after mastectomy indicated it positively influenced their sexuality, appearance, and had a positive impact on their life. However, Barreau-Pouhaer et al. (1992) determined some women delayed breast reconstruction after mastectomy because of tumor size, age, surgical site, treatment plan, and pathology results. Howard-McNatt (2013) discovered women did not utilize breast reconstruction after mastectomy because of race, stage of cancer, age, and socioeconomic environment.

African American Women Decision-Making about Reconstruction

Some African American women decision making about breast reconstruction after mastectomy were created around their perspective on beliefs, preferences, and culture ways to perform reconstruction options (Rubin et al., 2013). African American women are not provided adequate information on the safety of implants and the lack of trust with some practitioners on reconstruction plans (Rubin et al., 2013). The ethnicity played an essential part for African American women to undergo or forego breast reconstruction after

mastectomy (Howard-McNatt, 2013). African American women experienced lack of communication and knowledge with physicians which caused an essential part in making decisions that opted breast reconstruction (Nelson et al., 2012).

The Impact of Age on Breast Reconstruction Decision

Agarwal, Agarwal, Pappas, and Neumayer (2012) mentioned that mastectomy is a primary procedure that has been used for at least 60,000 United States women with breast cancer. Howard-McNutt (2013) noted that a few doctors are concerned about attempting to suggest breast reconstruction after mastectomy to older patients because of previous health conditions which put these patients at higher risk for complications from surgery. For older women, breast reconstruction after mastectomy was not important because of a preference to use prosthesis and fewer concerns about body structure (Rubin, Chavez, Alderman, & Pusic, 2013). According to a study by McGee et al. (2013), African American women depict greater delays in diagnosis and treatment than Caucasian - women. This is particularly seen among younger age groups: 20-39, 40, and 40-49. In addition, McGee et al.'s study concluded that determinants of the delay of treatment vary with respect to race. Therefore, racial differences in treatment delay appear to be prevalent among women who are less than 50 years old. Some surgeons do not recommend breast reconstruction to elderly women because of cultural beliefs and unessential surgery that can possible cause complications (Walton et al., 2011). Kruper et al. (2011) discovered as age increases in African American women, it is possible that there could be up to a 40% decrease in breast reconstruction after mastectomy. Siscoet et al. (2012) indicated various studies showed

younger individuals performed breast reconstruction after mastectomy at a higher percentage than women over fifty. Wolfswinkel et al. (2013) study indicated that age plays an important factor in that young women are more likely to undergo breast reconstruction after mastectomy. Younger women may be more concerned about beauty results and have a desire to replace the breast that was removed due to cancer. Furthermore, the study indicated that referring practitioners can be partial towards certain ages in making referrals to surgeons for breast reconstruction after mastectomy (Wolfswinkel et al., 2013).

The Impact of Education on Breast Reconstruction Decision

Wolfswinkel et al. (2013) suggested that awareness of impediment and lack of education to explain the pros and cons about surgical procedures could be reasons why African American women opted not to have breast reconstruction after mastectomy. Shippee, Kohimannil, Rowan, and Virnig (2014) suggested that African American women do not receive enough information about breast reconstruction options were less attentive in congregating with plastic surgeons. Umezawa et al. (2012) suggested that African American women have a lower level of understanding regarding breast cancer which related to a medical underprivileged class. Patients have misconceptions that having breast reconstruction might cause physicians to miss recurrence on breast cancer and the safety on various breast reconstruction options (Wolfswinkel et al., 2013). Saha et al. (2013) discovered that breast reconstruction has slightly increased over the years, but due to insufficient education on various breast reconstructions, women have second guessed about the benefit of the procedures. Jonston et al. (2013) suggested that doctors need to enhance

educational information for patients with restricted knowledge about treatment choices for breast reconstruction. Nelson, Nelson, Tchou, Serletti, and Wu (2011) determined that cultural lack of communication and individual's preference played a key role to forego breast reconstruction. Wolfswinkel et al. (2013) discovered that African American women compared to other cultures experienced deficiency of awareness and education about various approaches about breast reconstruction options after mastectomy. Nelson et al. (2011) found that educational information needs to begin with primary physicians and surgeons which are the first individuals to communicate with patients about procedure options.

The Impact of Religion on Breast Reconstruction Decision

Over the years, breast reconstruction after mastectomy has been an issue that women in America have had to face after breast cancer. Breast cancer could happen at any age, and from results; many women choose to undergo reconstruction after mastectomy. Arguably, reconstruction after mastectomy can improve the quality of life, despite the fact that a few women would choose not to undergo the reconstruction. Additionally, it is essential to highlight that African American women trust their cancer treatment team less (McGee et al., 2013). Breast cancer has increased at a higher rate in older African American women in the United States however religious beliefs can dominate choices related to breast cancer treatment (Umezawa et al., 2012). African American women are less likely to visit a surgeon for breast reconstruction after mastectomy than Caucasian - patients (Alderman et al., 2011). Recognizing additional determinants of the delay of treatment could enhance the

understanding of racial differences and is crucial for formulating policy and interventions to foster timely care. Wolfswinkel et al. (2013) studied various races and their probability of having breast reconstruction after mastectomy which was significantly lower in African American women. Salasky et al. (2013) discovered that African American women are diagnosed more often with advanced breast cancer than any other cultures. After the physician has sent referrals to plastic surgery, African American women may not like to follow-up to schedule appointments to discuss breast reconstruction options to replace the absence breast (Wolfswinkel et al., 2013). African American women have a strong trust in GOD as a liberator, miracle worker, and for guidance to assist with making decisions about situations in their life. Yang et al. (2013) found that regardless of various guidelines to assess equivalent care, African American women feel inconsistency more than other cultures when offered breast reconstruction after mastectomy because of disheartenment and insufficient discussion with practitioners. African American women have a lower rate of breast reconstruction after mastectomy than other cultures (Alderman et al., 2011; Sisco et al., 2012; Connors et al., 2015). Various studies have proven that some reasons for African American women not considering reconstruction of breasts after mastectomy lies in their beliefs as well as acculturation that these women have adopted (Nelson et al., 2012; Rubin et al., 2013; Alderman et al., 2011).

The Impact of Confidence Level on Breast Reconstruction Decision

In medicine, breast reconstruction is mostly offered to women who have undergone breast surgery, especially after episodes of breast cancer (Jagsi et al., 2014). African-

American women have been associated with a high level of indicating reluctance to perform breast reconstruction ranging from reconstruction after mastectomy to other dimensions of reconstructions (Jagsi et al., 2014). In a research published by Wolfswinkel et al. (2013), it is indicated that African-American women have indicated a high level of reluctance in regard to breast reconstruction after undergoing mastectomy. This is as a result of the fact that a significant number of African American women lack confidence when making decisions on whether to have breast reconstruction after mastectomy (Wolfswinkel et al., 2013). The lack of confidence is mainly caused by the fact that African-American women lack awareness concerning breast surgery mainly due to information and language barriers (Wolfswinkel et al., 2013).

African-American women confidence to seek breast reconstruction has also been negatively affected by the fact that they do not have proper assurance or have little assurance on medical practitioners in charge of treating cancer (McGee, Durham, Tse & Millikan, 2013). Additionally, African American women have indicated lack of knowledge on how to explicate the details of their expectation for reconstruction procedures (McGee et al., 2013). This has limited their confidence in seeking breast reconstruction after mastectomy. Apart from other factors such as age, socio-economic status, religion, and education, self-confidence is another pertinent issue that has had a significant impact among African-American women, in relation to undergoing breast reconstruction (Thorsen et al., 2012).

Misconceptions about Breast Reconstruction after Mastectomy

Pusic et al. (2012) discovered that individuals that attain information from external resources provided imprecise and misconceptions on breast reconstruction after mastectomy. Schneider and Mehrara (2015) suggested that misconceptions emerged for out of date information on complications and concerns about breast reconstruction. Nevertheless the small number of African-American women undergoing reconstruction is due to a given set of misconceptions and fears that immediate reconstruction would delay starting of chemotherapy hence some women may avoid the procedure (D'Souza et al., 2011). Butler et al. (2014) noted that misconceptions about African American women using their body tissue to perform breast reconstruction are not safe and ineffective because of pre-surgical issues. Also, most African American women do not believe that breast reconstruction is an option (Rubin et al., 2013).

Decision to Forego Breast Reconstruction after Mastectomy

Morrow (2014) conducted a research study on women who had undergone mastectomy using women from the Surveillance Epidemiology and End Result (SEER) registries of Detroit and Los Angeles. Age had an influence on the decision to forego breast reconstruction after mastectomy as older women were less likely to undergo the process. Most women also gave avoidance of additional surgery as a reason to forego reconstruction after mastectomy. Almost half of these women claimed fear of breast implants as a reason as well (Morrow, 2014). In the study patients' delay to having breast reconstruction after mastectomy was also attributed to the desire to focus on cancer treatment (Morrow, 2014).

According to a breast reconstruction study in JAMA Surgery, African American women are less likely to undergo reconstruction after mastectomy due to low-level of education, lack of insurance, and age (by which older women forego the reconstruction) (White, 2014). Additional major health problems also led to women foregoing breast reconstruction after mastectomy. A small notable number of African American women also were not even aware of reconstruction as a solution to regain the structure of the breast (White, 2014). Chemotherapy was another cause of failure to undergo reconstruction after mastectomy (White, 2014). African American women are less likely to undergo reconstruction after mastectomy, because of the level of education; according to the research study, the majority of the women were high school leavers (White, 2014). Black women were also more likely to claim lack of insurance as a reason for foregoing breast reconstruction after mastectomy (White, 2014).

In a quantitative study carried out between black and Caucasian women in America, black women are most likely not to undergo reconstruction (Rubin et al., 2013). This could be attributed to the fact that they are more challenged on cultural grounds, racial issues, healthcare disparity as well as bio-medicalisation. According to research (Rubin et al., 2013), of 27 African American women who underwent mastectomy, they still had different views about treatment options, racial and ethnic differences.

Another study by Alderman et al. (2011) showed that a greater percentage of women from Detroit and Los Angeles, where a high number of black women reside in America, do not consider breast reconstruction after mastectomy. The participants' ages ranged 79 years

or under for those that choose to forgo/undergo breast reconstruction after mastectomy. The information was retrieved from the Detroit and Los Angeles SEER for individuals that were diagnosed with invasive breast cancer (Alderman et al., 2011). The data used in the survey were sociodemographic, psychosocial characteristics, delay factors, and decision options that dictate the alternative for breast reconstruction. Alderman et al. (2011) found that women were more concerned about conquering breast cancer and uncertainty about the various breast reconstruction procedures which made it a low importance on their agenda. Older women who have undergone mastectomy would have a lower likelihood of considering breast reconstruction after surgery (Rubin et al., 2013). The author argued that religious basis was a reason that black women would not consider breast reconstruction after mastectomy, whereas other researchers believe there are other factors that slow the rate of breast reconstruction after mastectomy (Rubin et al. 2013). In terms of ethnic disparities, the existence of prejudice and discrimination lowers the level of confidence in black women and could be the cause of why these women are not considering breast reconstruction after mastectomy (Nelson et al., 2012).

Kruper et al. (2011) studied women that were post-mastectomy reconstruction in the California location. The study used the California health planning database to retrieve information ranging from 2003 through 2007 which various diagnoses was used to classify the individuals. The participants range from 40 years of age and up for the study. When correlative examined patients with or with reconstruction, researchers discovered that older

patients, Med-Cal insurances, and non-teaching health facilities results are higher than patient that undergoes breast reconstruction.

Summary and Conclusions

In the United States, about 60,000 women that are diagnosed with breast cancer undergo mastectomies to eliminate further spread of the cancer throughout the body (Agarwal et al., 2012). Particular to the past, African American women have encircled strong beliefs and cultural habits about undergoing or foregoing breast reconstruction after mastectomy. Age, religion, and education appeared to play a key role on the disposition of African American women's confidence level to have breast reconstruction after mastectomy. Butler et al. (2015) determined that practitioners are not offering referral and dishearten African American women about performing breast reconstruction after mastectomy. Yang et al. (2013) indicated cultural background played an essential part in African American women's decision about breast reconstruction after mastectomy. Access to information about reconstruction types and reconstruction timing may affect the decision to undergo or forego reconstruction. African American women could take advantage of possible benefits of breast reconstruction after mastectomy. Available education materials on various breast reconstruction options could inform African American women's decisions about breast reconstruction after mastectomy. Chapter 3 includes the methodology that was used in this research study including the population, sampling size, data collection, and instruments used in the research.

Chapter 3: Research Method

Introduction

Although breast reconstruction after mastectomy may be offered to all breast cancer patients, African American women are not undergoing the non-cosmetic procedure to replace the absent breast (Enewold et al., 2014). The purpose of this study was to determine: (a) the extent at which age, religion, and education are associated with the decision to forego or undergo breast reconstruction after mastectomy; and (b) the relationship between the level of confidence of decision making and decision to forego or undergo breast reconstruction after mastectomy among African American women in North Central Florida. I used a questionnaire in this study to collect information from African American women who experienced having a mastectomy. Chapter 3 includes discussion of the research design, population, recruitment procedures, data collection, instrumentation and operationalization of constructs, data analysis, threats to validity, and ethical procedures.

Research Design and Rationale

I utilized a cross-sectional quantitative study design and analyzed the extent to which age, religion, education, and confidence level impact African American women's decision to forego or undergo breast reconstruction after mastectomy. Creswell (2009) stated that a quantitative research study can be used to evaluate the relationships between variables. Creswell (2009) suggested that information that is collected, analyzed, and interpreted from a questionnaire provides an accurate and reliable study.

In this study, the responses to questionnaires allowed me to investigate the extent to which certain factors and confidence level affect the decision by African American women to have, or not have, breast reconstruction after mastectomy. The independent variables were age, religion, confidence level, and education. The dependent variable was the decision to undergo/forego breast reconstruction after mastectomy. The use of quantitative methodology was useful to advance knowledge in this particular woman's health procedure as it provided information about the relationships between various factors that may influence African American women's decision-making about breast reconstruction after mastectomy.

There were no resource constraints for this study. The costs incurred in the study included producing copies of the questionnaires and the pens used by the respondents in the study. There were time constraints, as the I took several months to obtain enough participants. Data collection took place after services at select churches in Florida; the pastors of these churches provided the dates on which I could interact with potential study participants. No data collection took place until (IRB) approval had been received. The assigned IRB number for this study was 06-09-16-0246679

For this study, there were 2 research questions and 4 hypotheses:

RQ1: Quantitative: For African American women, to what extent are age, religion, and education associated with the decision to forego or undergo breast reconstruction after mastectomy?

*H*₀1: For African American women, there is no association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy?

*H*₁1: For African American women, there is an association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy?

RQ2: Quantitative: For African American women, is there a relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

*H*₀2 For African American women, there is no relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

*H*₂: For African American women, there is a relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

Methodology

Population

The participants for this study were African American women ages 18 and older, who were residents of Florida, and had had a mastectomy. According to the American Community Survey 2013, it was estimated that 13,969 African American women are resided in North central area (United States Census Bureau, 2013).

Sampling and Sampling Procedures

This method of sampling deliberately I used purposive sampling for this study. The participants with desired qualities in a particular study population qualified deliberately and objectively for sampling (Crossman, 2015). Purposive sampling is effective when there is sufficient choice knowledge about the target population. Additionally, it is most useful when the for the target population takes place based on a certain characteristic that those in the population share (Bryman, 2015), making this sampling strategy suitable for the study of the factors influencing African American women's decision to undergo or forego breast reconstruction after mastectomy.

The criteria to participate in this study were: (a) African American woman, (b) underwent a mastectomy procedure, (c) age 18 and older, and (d) currently residing in the Florida region. Any participants who did not meet these criteria were excluded from the study. There were some challenges in recruiting women who met the study criteria because the study population is unique. Breast cancer tends to affect each woman differently, and several unique factors may influence their reaction after their mastectomy.

The recruitment of the participants was from various churches around the North Central Florida region.

For quantitative research studies, researchers must determine the sample sizes required. Sample size calculations for my study were done using a G*Power analysis (Faul, Erdfelder, Buchner, & Lang, 2009). G*Power analysis makes use of four parameters: alpha level, power level, N (sample size), and effect size (ES). The importance of the alpha level

is to find the probability of identifying significance/ false positive where none exists, and it is generally set at .05. The power level, on the other hand, determines the possibility of identifying true significance/ true positive and is generally set at .80 in the study. n refers to the sample size and is the parameter to be solved. The ES may be deduced from published studies, educated guesses, or simply calculated (Hunt, n.d.). The ES used for the study was .3. Using a power of .8 and a p -value less than .05 to determine the statistical significance, G* Power analysis calculated a sample size of 88 participants were needed for the study. The Chi-square test was the statistical test used in the study.

Recruitment, Participation, and Data Collection

To recruit study participants, I spoke with pastors, leaders, ushers, and deacons at local churches in North Central Florida about the purpose of the study. I provided them with detailed information about the study. I sent out letters and arranged meetings with church pastors to personally explain information and evaluate dates to speak to African American women who may have wished to volunteer in the study (Appendix B). I also provided flyers about the research and qualifications for participants that might wish to participate in the study (Appendix D).

Women that were interested in the study could ask questions and learn more information about the study. I had handouts and letters available with details for women that indicated an interest in participating in the study (Appendix C). The participants completed one questionnaire as instructed. The questionnaire was in English and available on a table with pencils for participants to complete. Completed questionnaires were dropped into a

secure box in the back of the church. I removed the box 1 hour after the service and prepared information for data analysis.

I investigated various factors influencing the decision of African American women to forego/undergo breast reconstruction after mastectomy. Demographic information such as the women's age, ethnicity, and residency location, and whether the person had had a mastectomy was collected. Participants were given a participant information sheet to help them determine if they wanted to participate in this study (Appendix A). If individuals did not meet the study inclusion criteria, they were excluded from the study. Upon completion of the questionnaires, there were no further study activities or any additional follow-up for participants.

Instrumentation

The generation of a single questionnaire in the study was achieved by combining two published questionnaires and demographic information. The first segment of the questionnaire included demographics from participants such as gender, age, residence, and education level (Appendix D). The second segment of the questionnaire related to the Manual-Decision Self-Efficacy Scale developed by Bunn O'Connor (2014). O'Connor gives researchers permission to use the tool without cost and only requests to be cited in the reference list (O'Connor, 2014). The evaluation of self-confidence or trust in the individual capability with decision-making was done using a 5-point scale of the manual-decision self-efficacy scale.

(Appendix F). Reliability and validity of this scale has been established in other studies. Garcia et al. (2012) conducted a study to determine the factors that influence the use of mammography among different racial groups and assessed self-efficacy. Nina et al. (2011) intimated that self-efficacy has played a critical role in cancer detection. The reliability score for the study was established to be 0.85.

The questionnaire used a Likert scale. Categories within the scale included not at all confident to well confident and were rated from 0 to 4 throughout the survey. The survey scores for each individual were summed, divided by 11 and then multiplied by 25 to determine the confidence level (O'Connor, 2014). The score range was 0 to 100; the high point specifies strong confidence and the low point indicates low confidence in decision making. The third segment of the questionnaire related to Religious Coping Activities Scale on a 4-point Likert scale that evaluated the negative and positive outcome on various events in life. The reliability score for the study was established to be .85. The categories within the scale included not at all to a great deal which were rated from 1 to 4 in the survey. The high score obtained from the addition of the two subscales determined the individual's negative and positive religious decisions on various ways of coping with everyday events. I received permission from Dr. Kenneth Pargament to use and access the Religious Coping Activities scale for my research study (Appendix H). Pargament (1997) stated that positive subscale responses were summed up that established the positive RCOPE and the negative subscale responses were summed up that established the negative RCOPE from the questionnaires.

Operationalization of Variables

The variables for the research study are available in Table 1 which includes the variable name, type of variable, relevant research question, instrument used, and how the variable was measured on the instrument.

Table 1

Operationalization of Variables

Variable Name	Type of Variable	Research Question	Instrument	How Variable Measured
Age	Interval	RQ1	Demographic Survey	Numerical
Religion	Nominal	RQ1	Religious Coping Scale	None, little, somewhat, confident, very confident
Education	Ordinal	RQ1	Demographic Survey	High School, AA, As, Bachelor, Master, Doctoral
Confidence Level	Ordinal	RQ2	Decision Self-efficacy Scale	Likert-Scale

Data Analysis Plan

Using the social-cognitive framework as a guide for this study, the research questions and hypotheses for this study were as follows:

RQ1: Quantitative: For African American women, to what extent are age, religion, and education associated with the decision to forego or undergo breast reconstruction after mastectomy?

H_{01} : For African American women, there is no association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy?

H_{11} : For African American women, there is an association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy?

RQ2: Quantitative: For African American women, is there a relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

H_{02} For African American women, there is no relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

H2: For African American women, there is a relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

Data were analyzed using SPSS (Statistical Package for the Social Sciences version 21.0). SPSS analyzed data and generated graphs and tables for the research. The SPSS offers invaluable data analysis information which is substantiated using tables and graphs in order to foster a high level of understanding of data analyzed (Gaur & Gaur, 2009). The information for this research was analyzed using the Chi-square tests and logistic regression. In the study, the strategy was examined the connection and direction of the information to valid the accurate model in the research. When using SPSS for logistic regression analysis, various assumptions were required for valid outcome. The Chi-square test assisted in testing any relationship within the dependent and independent variables. A p -value of $\leq .05$ was used to determine if the null hypothesis was accepted or rejected.

For research question one:

RQ1- Quantitative: For African American women, to what extent are age, religion, and education associated with the decision to forego or undergo breast reconstruction after mastectomy?

I used a Chi-square test and logistic regression for data analysis to answer research question 1. Logistic regression was appropriate in terms of analyzing the correlation between dependent and independent variables (Afif & Azen, 2014). In this case the dependent variable used during analysis included decision to undergo/forego breast reconstruction after mastectomy. The independent variables considered for logistic regression included age, religion, and education level. Theoretically or hypothetically, it was expected that the mentioned independent variables would have an impact on the

decision as whether to undergo or forego breast reconstruction. As such, the Chi-square test was used to analyze the level of agreement between observed values and theoretically-expected values. Results were interpreted to be statistically significant if the p value was $\leq .05$ and the null hypothesis was rejected.

For research question two:

RQ2 – Quantitative: For African American women, is there a relationship between the level of confidence in decision making and the decision to forego or undergo breast reconstruction after mastectomy?

I used a Chi-square test in analyzing data related to this research question. Results were interpreted to be statistically significant if the p value was $\leq .05$ and the null hypothesis was rejected.

Descriptive statistics provided the opportunity to evaluate the mean and median for demographic information in the study. I collected all data from the questionnaires and entered into the SPSS software. The cleaning process for incomplete information from the surveys was to create a 99 code in SPSS that would indicate data information was incomplete.

Threats to Validity

The participants were part of churches in Florida and may have felt obligated to respond in a way that was favorable to the beliefs of their church. This was controlled for by informing women that their information is anonymous and confidential. Information collected represented mainly the region of North Central Florida and can be generalized to

the larger population of African America women. A potential threat to internal validity in this research study was related to instrumentation. However, the two published questionnaires which were part of the instrument used in this study have undergone reliability testing in earlier studies. In addressing the association between variables in this research, a significance value of $p \leq .05$ was selected to minimize the threat to statistical conclusion validity.

Ethical Procedures

Approval was obtained from the Walden University IRB (# 06-09-16-0246679) prior to conducting the study. Permission to gain access to participants was granted by pastors of each church. Participation was voluntary and participants could decline to participate at any time. The participants were given information (Appendix A, C) about the research before completing the questionnaire. The information on the questionnaire and the participant's identity is anonymous and will not be disclosed to anyone except the researcher. The questionnaires were put inside a locked box in the back of the church after completion and I was the only one to remove the box from the church. The questionnaires were locked and secured in a cabinet in my home after the information was entered into a laptop with password protection. I am the only one who has access to the secure cabinet in my home. The questionnaires will be retained for five years and then destroyed by the National Shredding Alliance in Gainesville, Florida.

Summary

Chapter 3 provides specific information about the methods used to conduct this study as well as the two questionnaires, how they were administered, and the location participants were recruited from. The participants were African American women that had mastectomies and ages ranging from 18 and up to participate in the study. Chapter 4 includes provide information about the data, coding, analysis, and interpretation of the results from the study.

Chapter 4: Results

The purpose of this cross-sectional quantitative correlational study was to determine: (a) the extent to which age, religion, and education are associated with the decision to forego or undergo breast reconstruction after mastectomy; and (b) the relationship between the level of confidence of decision making and decision to forego or undergo breast reconstruction after mastectomy among African American women in Florida.

The following research questions and hypotheses guided this study.

RQ1: Quantitative: For African American women, to what extent are age, religion, and education associated with the decision to forego or undergo breast reconstruction after mastectomy?

H_01 : For African American women, there is no association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy?

H_11 : For African American women, there is an association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy?

RQ2: Quantitative: For African American women, is there a relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

H_02 For African American women, there is no relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

H2: For African American women, there is a relationship between the level of confidence of decision making and the decision to forego or undergo breast reconstruction after mastectomy?

Data Collection

Data collection from participants at six churches in the Florida region lasted for nine months. Identification of 120 African American women followed the selection of churches, 88 of these women participated in completing the survey. The survey questionnaire included questions about demographics, self-efficacy, religion, and the women's decision to undergo or forego breast reconstruction after a mastectomy. The only discrepancy in collecting data information from the original plan in Chapter 3 was that I had to identify more churches in order to recruit a sufficient number of African American women to complete the sample size for the study.

The focus of this study was to determine the factors that affect the decision of African American women living in Florida to undergo or forego breast reconstruction after mastectomy. The results of this study may not be generalizable for all women that experienced breast cancer. Table 2 provides descriptive information about the sample of women included in this study.

Table 2

Frequency Table of Demographic Variables

Demographics	Number of participants (<i>n</i>)	Percent of total (%)
Education		
High School	24	27
College (AA,AS)	18	20
Bachelor	22	31
Master	14	16
Doctoral	6	3
Age		
18-26	4	5
27-36	9	10
37-46	23	30
47-56	33	39
57-64	14	15
65 and over	1	3
Type of Mastectomy		
Yes	88	100
No	0	0
If, Yes the duration of Mastectomy		
Under one year	7	8
One to two years	15	17
Three to five years	34	39
More than six years	32	36
Any type of Breast Reconstruction?		
Yes	50	50
No	50	50
Considering any type of Breast Reconstruction		
Yes	38	43
No	43	49
N/A	7	8

The sample was completely made up of African Americans (100%, $n = 88$). The sample had high representation (51%, $n = 40$) for undergraduate participants with 31% ($n = 22$), the largest group in the sample, graduated from bachelor programs and 20% ($n = 18$) finished AA or AS college education. Participants who completed high school comprised the third largest group in this category (27%, $n = 24$). Participants with postgraduate credentials had the lowest representation in the sample with 16% ($n = 14$) graduated from masters programs and less than 5% (3%, $n = 6$) from doctoral programs.

More than half (69%, $n = 56$) of the sample had an age range of 37 to 56 years with the highest representation in the 47-56 age group (39%, $n = 33$), followed by the 37-46 age group (30%, $n = 23$). Participants with 57+ age followed in representation (18%, $n = 15$) with the lowest group had an age of <36 years old (15%, $n = 13$). The lowest representation was for the 65+ age group (3%, $n = 1$).

All participants (100%, $n = 88$) had some type of mastectomy with predominance (75%, $n = 66$) among those with at least 3 years post-operation. Participants with 3 to 5 years of mastectomy (39%, $n = 34$) surpassed those with more than 6 years of mastectomy (36%, $n = 32$). Participants with less than 2 years of mastectomy were the least represented (25%, $n = 22$) in this sample.

The participants were equally represented (50%, $n = 50$, respectively) between those who had and did not have any type of breast reconstruction. A very high number (43%, $n = 38$) of those who had not had breast reconstruction had considered having reconstruction.

Results

RQ1- Quantitative: For African American women, to what extent are age, religion, and education associated with the decision to forego or undergo breast reconstruction after mastectomy?

H₀1 For African American women, there is no association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy?

H₁1 For African American women, there is an association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy?

Data analysis using logistic regression made it possible to answer the first research question on whether there was a relationship between age, religion, and education of decision-making to forego or undergo breast reconstruction after mastectomy. The sample consisted of 81 participants, 38 (46%) of which confirmed that they underwent mastectomy and 43 (53.1%) stated that they decided to forego the procedure. The overall equation, including all factors, produced a $p = .579$ ($p \geq .05$), which shows that there is no significant impact of the selected factors on the women's decision related to breast reconstruction after mastectomy. In Table 3 and 4, the tests confirmed the result. They showed the $p = .382$ and the goodness-of-fit results using Hosmer-Lemeshow Test showed a $p = 0.1$. Thus, acceptance of null hypothesis showed no statistically significant correlation between the age, education, religion and their decision to conduct breast reconstruction after mastectomy.

Table 3

Logistic Regression Results for Decision about Breast Reconstruction Surgery

	Chi-square	<i>df</i>	Sig.
Step	4.185	4	.382
Step1 block	4.158	4	.382
Model	4.185	4	.382

Table 4

Goodness of Fit Results using Hosmer-Lemeshow Test

Step	Chi-square	<i>df</i>	Sig.
1	13.555	8	.100

The next portion of the analysis was held for clarification of whether each of the selected variables separately affected women's decisions to undertake or not to undertake mastectomy. However, the findings for age, education, and religion reveal a lack of such a connection. Table 5 and Table 6 shows the decision to forgo or undergo breast reconstruction after mastectomy appears to have no significant relationship to age ($p = .923$ [95% CI .646-1.487]), education ($p = .366$, [95% CI .584- 1.220]), negative religion (NR) ($p = .630$ [.915-1.055]) or positive religion (PR) ($p = .134$ [.735-1.042]). Therefore, the findings reveal that there is no statistically significant connection between the selected factors and the decision to undergo/forego reconstruction, and the null hypothesis was accepted. Age, education, and religion had no impact on their decision.

Table 5

Coefficients Summary for Age, Education, and Religion Preference

	B	S.E.	Wald.	df	Sig.	Exp(B)	95% C.I. for EXP (B) Lower
Age	-.020	.009	.009	1	.923	.980	.646
Education	-.170	.188	.817	1	.366	.844	.584
NR	-.018	.036	.232	1	.630	.983	.915
PR	-.134	.089	2.243	1	.134	.875	.735
Constant	4.392	2.544	2.979	1	.084	80.785	

Table 6

Coefficients Summary for Age, Education, and Religion Preference

		95% C.I. for EXP (B)
Step 1a		Upper
	Age	1.487
	Education	1.220
	NR	1.055
	PR	1.042

RQ2- Quantitative: For African American women, is there a relationship between the level of confidence of decision-making and the decision to forego or undergo breast reconstruction after mastectomy?

H_{02} = For African American women, there is no relationship between the level of confidence of decision-making and the decision to forego or undergo breast reconstruction after mastectomy?

H_{12} = For African American women, there is a relationship between the level of confidence of decision-making and the decision to forego or undergo breast reconstruction after mastectomy?

The second research question tested whether there was a relationship between the level of confidence of decision-making and the decision to forego or undergo breast reconstruction after mastectomy. Here, the findings from 88 participants were analyzed using chi-square and logistic regression. Each of the methods was applied for discerning the differences between two groups of African American women studied: those who made the

decision to undergo breast reconstruction and those who chose to forego breast reconstruction after mastectomy.

As shown in Table 7, the value of test statistics is 6.355 with a p -value = 0.042. Given that the research had a significance level of 0.05, then the p -value is much greater than the significance level. Consequently, the null hypothesis is rejected. This is because the results do show significant evidence to suggest an association between confidence level and the decision to undergo or forego the procedure.

Table 7

Logistic Regression Results Using Level of Confidence in Decision-Making

	Value	<i>df</i>	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.355 ^a	2	.042
Likelihood Ratio	6.822	2	.033
Linear-by-Linear Association	5.314	1	.021
N of Valid Cases	81		

a. 2 cells (33.3%) have expected count less than 5.

The minimum expected count is 2.35.

As shown in Table 8, it is clear that the more confident the respondents are about breast reconstruction, the more likely they are to consider the procedure. African American women that consider the procedure, there are only 2.6% of them who have low confidence for breast reconstruction. This is in comparison to the 92% who have high confidence in the procedure. However, varying results are seen in the group that would not consider breast

reconstruction. According to the data presented, up to 69% of the respondents would not consider the procedure despite having high confidence of the procedure. The indication, therefore, is that the null hypothesis cannot be rejected since the decision to undergo or forego the procedure does not necessarily depend on the level of confidence. Over two-thirds of the respondents cannot undergo the procedure despite having confidence in it. While exploring the -2LL and pseudo-R-square values for the data, the model summary in logistic regression indicates that the -2LL value is 106.250 and the Nagelkerke R^2 value is 0.091 as shown in Table 9. This indicates that there is about 9.2% variation in the outcome. This is quite low, and hence the results from the Chi-square still stand. From the charts, it is clear that the null hypothesis cannot be rejected. Table 10 shows the continuous variable Level of Confidence was a significant predictor of considering breast reconstruction (Wald = 4.858, p-value = 0.028). The odds ratio for Level of Confidence was 0.948. This means that as Level of Confidence increases, a woman is 0.948 times less likely to consider breast reconstruction surgery.

Table 8

Cross-Tabulation Results for “You considering any type of Breast reconstruction” and Level of Confidence

				You considering any type of Breast Reconstruction	
			Yes	No	Total
Confidence Category	Low confident	Count % within You considering any type of Breast Reconstruction	1 2.6%	4 9.3%	5 6.2%
	Moderate confident	Count % within You considering any type of Breast Reconstruction	2 5.3%	9 20.9%	11 13.6%
	High confident	Count % within You considering any type of Breast Reconstruction	35 92.1%	30 69.8%	65 80.2%
Total		Count % within You considering any type of Breast Reconstruction	38 100.0%	43 100.0%	81 100.0%

Table 9

Model Fit Statistics for Level of Confidence

Step	-2 Log likelihood	Cox & Snell R square	Nagelkerke R Square
1	106.250 ^a	.068	.091

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001

Table 10

Coefficients Summary for Level of Confidence

	B	S.E	Wald	df	Sig.	Exp (B)
Step 1 ^a Confidence index	-.053	.024	4.759	1	.029	.948
Constant	5.096	2.312	4.858	1	.028	163.405

a. Variable(s) entered on step 1: Confidence index

Summary

A cross-sectional quantitative study was used to evaluate the association with age, religion, education, and confidence level on an African American women's decision to forego or undergo breast reconstruction after mastectomy. Chapter 4 entailed with collecting data and analyzing results from 88 African American women decision-making to forego or undergo breast reconstruction after mastectomy. The sampling was purposive sampling of African American women from North Central Florida that had a mastectomy. For research question one, a logistic regression was performed which indicated no statistically significant relationship between the age, education, religion and their decision to

conduct breast reconstruction after mastectomy. For research question two, a logistic regression was performed which indicated a significant relationship between the confidence level of decision-making and the decision to forego or undergo breast reconstruction after mastectomy. Chapter 5 includes the interpretation, limitation, recommendations, implications for social change, and conclusion for this study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this cross-sectional quantitative correlational study was to determine the extent to which age, religion, education and the relationship between these variables are associated with the decision to forego or undergo breast reconstruction after mastectomy and to determine the relationship between the level of confidence of decision making and decision to forego or undergo breast reconstruction after mastectomy among African American women in North Central Florida. I used a correlational study to find an association between the age, religion, education, and level of self-confidence.

I recruited 88 African American women from churches in North Central Florida whose ages ranged from 18 to 65 years and older to participate in the study. The participants were asked to complete Decision Self-Efficacy and Religious Coping Activities questionnaires for the study. The data were collected and analyzed using chi-square tests and logistic regression. The results showed a significant relationship ($p=.042$) between the confidence level of decision-making and the decision to forego or undergo breast reconstruction after mastectomy.

Interpretation of the Findings

Breast reconstruction is a surgical operation meant to assist women in their recovery from the deformities caused by mastectomy as a treatment for breast cancer. African American women are reluctant to pursue breast reconstruction after the removal of cancerous cells and tumors through a mastectomy (Shippee, Kozhimanni, Rowna, & Virnig,

2013). Various factors influence their decision making about whether to undergo or forego breast reconstruction surgery.

The findings of this study demonstrate that age, education, and religious factors do not influence the decisions made by most of the African American women regarding breast reconstruction. The statistical analysis from the study further shows that there are no connections between the factors and the choices made by the women about either to undergo or forego breast reconstruction after mastectomy. However, this is contrary to the findings from literature that demonstrated that these factors play a key role in the kind of decisions made by the African American women (Umezawa et al., 2012). Knowledge about the treatment, religious beliefs, and the perceptions about age related health complications are the influential factors for decisions made by the patients (Rubin et al., 2013). Further, the factors also determine the level of trust that patients have in the breast reconstruction surgery.

Additional findings of this study demonstrated that the degree of confidence exhibited by African American women related to reconstructive breast surgery after mastectomy influenced their decisions. These conclusions contrast with those of the peer-reviewed literature, which showed that patients with positive knowledge and adequate information about breast reconstruction had more confidence with the treatment than those who were confined to misconceptions and limited knowledge. Hence, the confidence levels were found to be proportionate to the decisions made by the patients whether to undergo or forego reconstruction after a mastectomy.

The theoretical framework was based on SCT. SCT posits that an individual's reaction and behavior influences individuals and environment (Bandura, 1986). This framework was applied to the research to understand how an African American woman's mindset and cultural background affects their decision making on breast reconstruction surgery and to what extent multifaceted variables such as age, religion, education, and level of self-confidence impact this decision.

The study results revealed that the factors of age, religion, and education had no significant influence on the African-American women's decision to undergo or forego breast reconstruction after mastectomy ($p=.579, p>.05$). Therefore, the null hypothesis; H_01 , for African American women, there is no association between age, religion, and education and their decision to forego or undergo breast reconstruction after mastectomy, was accepted. Even when each of these demographic variables were analyzed individually, they revealed no significant impact on the participant's decision to undertake or forego breast reconstruction; age ($p= .923$ [95% CI .646-1.487]), education ($p= .366$, [95% CI .584-1.220]), negative religion (NR) ($p=.630$ [.915-1.055]) or positive religion (PR)($p=.134$ [.735-1.042]), all of which the Pearson coefficient was above the minimum 0.05 (for all $p>.05$).

Using the Chi-square correlation, the results also revealed that there is a significant correlation between the level of self-confidence in decision-making and the decision to undergo or forego breast reconstruction among the participants (p -value =0.042). The null hypothesis; H_02 , for African American women, there is no relationship between the level of

confidence of decision-making and the decision to forego or undergo breast reconstruction after mastectomy, is rejected. From further regression analysis, it is clear that the more confident the respondents are about breast reconstruction, the more likely they are to consider the procedure. From the sample population, there are only 2.6% of participants who have low confidence for breast reconstruction compared to the 92% who have high confidence in the procedure.

Given that self-efficacy is a personality characteristic, a construct of the SCT-, it is clear that the theory assist in understanding the role in the African-American women's reaction and beliefs surrounding their decision-making paradigm. These findings agree with the Amsellem et al. (2011) and Zycinska (2015) survey results that confirmed the influence of self-efficacy and positive expectations, constructs of the SCT, on women's decision to undergo breast reconstruction. According to Zycinska (2015), in deciding to have or not to have breast reconstruction, strong self-efficacy signifies women's beliefs in their ability to undergo breast reconstruction surgery despite the associated difficulties.

Limitations of the Study

The objective of this research was to determine the role of the selected factors (age, religion, education, and self-confidence) in the African American women's decision making regarding breast reconstruction after a mastectomy. One of the limitations associated with the collected data was that the findings would only be generalizable within the sample population. The research was also limited to African American women and could have different results if conducted in other regions in the United States. Additionally, the study

was limited to female participants disregarding the fact that some of the factors being investigated might be gender-related thus making it necessary to include males in future research for validity in the findings. The validity of the collected data also faced limitations because most of the participants were members of churches in North Central Florida. For this reason, they are more likely to respond with religious beliefs due to their faith thus hindering the validity of the findings. Moreover, the instruments used in the study would also threaten the validity of the data collected, due to dishonesty. However, the questionnaires used for the research underwent previous reliability testing to establish the maximum validity of the conclusions.

The various assumptions made before the study also limited the reliability of the findings. For instance, I assumed that the participants would provide their responses about breast reconstruction after mastectomy with absolute honesty. Factors leading to dishonesty amongst some of the respondents may significantly lower the reliability of the findings. The other assumption I made was that enough participants would be accessed to complete the survey with positive attitudes towards the research questions. The use of reliable instruments in the collection of data for the study was also important for the accuracy of the statistical conclusions and their reliability.

Recommendations

The information that was discovered in this study could provide an understanding of the extent to which certain factors contribute to decision-making about breast reconstruction after mastectomy in African American women. The findings on self-confidence related to

African American women's decisions to forego breast reconstruction after mastectomy should be disseminated to practitioners to understand the key points about their choices on reconstruction. Additionally, African American women may need extra educational materials, videos, and seminars on various breast reconstruction options to understand in detail what to expect before and after the procedure. Church leaders and community leaders should offer some workshops which can assist African American women to be proactive in asking questions of their health care practitioners about various breast reconstruction options. Furthermore, a study should be conducted about ways to improve relationships between African American women and their physicians to increase communication skills and knowledge about breast reconstruction. Health care practitioners also need to provide more outside resources to African American women, which relate to the cultural aspect of with decision making about breast reconstruction.

Implications for Social Change

Breast reconstruction is a necessary action after mastectomy to restore a woman's body image and social well-being. The results from the study of how the factors of age, religion, education, and self-confidence influence the decisions of the African American women regarding breast reconstruction can be used to promote positive social change amongst African American patients. For instance, improvement in self-esteem is one of the changes that can play a fundamental role in ensuring the well-being of African American women after mastectomy. Positive social change can significantly impact individual patients, families, breast cancer organizations, and the entire African American community.

Breast reconstruction surgeries during and after a mastectomy can enhance the psychological health of the patients by restoring their social image as well as their female sexuality aspects. This can boost the self-confidence of individuals that have experienced any type of mastectomy. Most of the African American women can adopt a positive attitude toward breast reconstruction after mastectomy. Furthermore, improved self-esteem may promote their psychological health and strengthen their family relationships even after a breast reconstruction surgery. Consequently, the patients become more active and productive in the society due to increased self-confidence.

Breast cancer organizations can also understand the extent to which the factors such as religion, age, self-confidence, and education influence the choice of African American women to undergo or forego breast reconstruction after mastectomy. Surgeons and health care practitioners dealing with breast cancer can utilize the new findings to tailor their services to African American women based on these influential factors. For instance, they may be able to provide educational information to the patients regarding the impacts of breast reconstruction surgery. The knowledge may help eliminate the African American societal misconceptions about breast reconstruction. The awareness created can significantly instill a positive social change in the African American women regarding breast reconstruction after mastectomy.

Conclusion

This quantitative, correlational study examined the extent to which certain factors (age, religion, confidence level, and education) were associated with the decision to forgo or

undergo breast reconstruction after mastectomy among African American women. The logistic regression results showed a significant association between confidence level and the decision to undergo or forego the procedure. The higher the confidence level, the greater the likelihood the participant will consider breast reconstruction after mastectomy. However, the logistic regression results showed no significant association between age, religion, and education and the African-American women's decision to undergo or forego breast reconstruction after mastectomy. The results of this study can assist practitioners in developing educational materials about breast reconstruction after mastectomy for African American churches, leaders, and health fairs that are held in the community. Breast reconstruction can increase with African American women if educational materials and videos are provided to help women understand various ways to replace any type of mastectomy. The results of this study may encourage African American women to consider breast reconstruction after having any type of mastectomy.

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Appendix A: Participant Information Sheet

You are invited to take part in a research study about decision-making related to breast reconstruction after mastectomy because you are an African American woman who has undergone mastectomy. This form is part of a process called “informed consent” which will allow you to understand this study before deciding whether or not to take part. This study is being conducted by a researcher name Senetta Hunt-Coleman who is a doctoral student at Walden University

Background Information:

The purpose of this study is to assess age, religion, education, and confidence level and how it affects an African American women’s decision to undergo or forego breast reconstruction after mastectomy.

Procedures:

If you agree to be in this study, you will be asked to:

- Complete a questionnaire

Completing the questionnaire will take about 15-20 minutes of your time.

Voluntary Nature of the Study:

This study is voluntary. Your decision of whether or not you choose to be in the study will be respected. You will not be treated differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later and stop at any time. Please answer all questions you feel comfortable completing, or you may discontinue at any time; however, please note questions that are incomplete, cannot be used for the study.

Risks and Benefits of Being in the Study:

There are very limited risks or discomfort associated with this research study. However, participants may experience anxiety and stress while recalling this time period in their lives. Information learned from this study may assist practitioners and surgeons to better understand how African American women make the decision to perform breast reconstruction after mastectomy.

Payment:

There is a \$5 gift card for participants that volunteer to participate in the study.

Privacy:

Any information you provide will be kept anonymous and will only be used for the study. The researcher will not include your name or any other information that could identify you on the questionnaire or in the study reports. Data will be kept secure in a combination safe.

Statement of Consent:

If you feel you understand the study well enough to make a decision about it, please indicate your consent by returning a completed questionnaire.

Appendix B: Letter of Cooperation

Date

Dear

Based on my review of your research proposal, I give permission for you to conduct the study entitled Factors Associated with the Decision of African American Women to Undergo/Forego Breast Reconstruction after Mastectomy within our church. As part of this study, only the principal investigator will be recruiting African American women, age 18 and up to participate in completing surveys for your study. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: Informing potential participants about the study by handing out informational flyers as well as how to get in contact the principal investigator for recruitment. The designated area will be provided by the pastor or church affiliate. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Appendix C: Letter's to Participants

Dear Participants,

Hello! I am a student from Walden University currently pursuing a PhD in health care services. I am in the process of searching for participants for a study I am currently conducting, particularly from several churches within African American communities in the central Florida region. The study focuses on African American women who are at least 18 years of age who have undergone mastectomy due to breast cancer.

The purpose of the study is to learn more about how age, religious, education and confidence level affect decision making about breast reconstruction after mastectomy. The study is voluntary and all participants can decide to participate or not participate in the study. Please answer all questions you feel comfortable completing, or you may discontinue at any time; however, please note questions that are incomplete, cannot be used for the study. All consent forms are available for participants to keep.

Sincerely

Senetta Hunt-Coleman

Doctoral Student

Appendix D: Recruitment Flyer

Need Volunteers to Participate in a Study

Volunteers are needed to participate in a questionnaire study about African American women's decision to forego or undergo breast reconstruction after mastectomy and to complete a questionnaire.

Eligibility:

- At least 18 years of age and older
- Had a mastectomy
- Female
- African American
- Resident of central Florida

What the participants will need to do:

- Complete a questionnaire that is anonymous.
- Drop completed or incomplete questionnaire in the lock box in the back of the church.

Compensation:

- There is a \$5 gift card for participants that voluntary to participate in the study.

Appendix E: Demographic Information

- The information participants are providing for the study will be kept confidential.
- Please complete all questions on the survey

1. Please check the box that applies to you:

High School

College (AA, AS,)

Bachelor

Master

Doctoral

2. Please check the box in the age range:

18-26

27-36

37-46

47-56

57-64

65 and over

3. Do you live in central Florida?

Yes Or No

4. Please check your ethnicity:

African American

White

Hispanic

Native American Indian

Other

5. Have you had any type of mastectomy?

Yes No

If yes, please mark the appropriate year below:

Under one year

one to two yeas

three to five years

more than six years

6. Have you had any type of breast reconstruction?

Yes

No

7. Are you considering any type of breast reconstruction?

Yes

No

N/A

Appendix F: Decision Self-efficacy Scale

Please show how confident you feel in doing these things by circling the number from 0 (not at all confident) to 4 (very confident) for each item listed below (O'Connor, 1995).

1. Get the facts about the benefits of each choice	Not at all confident	0	1	2	3	4	Very confident
2. Get the facts about the benefits of each choice	Not at all confident	0	1	2	3	4	Very confident
3. Understand the information enough to be able to make a choice	Not at all confident	0	1	2	3	4	Very confident
4. Ask questions without feeling dumb	Not at all confident	0	1	2	3	4	Very confident
5. Figure out the choice that best suits me	Not at all confident	0	1	2	3	4	Very confident
6. Handle unwanted pressure from others in making my choice	Not at all confident	0	1	2	3	4	Very confident
7. Let the clinic team know what's best for me	Not at all confident	0	1	2	3	4	Very confident

8.Delay my decision if I fell I need more time	Not at all confident	0	1	2	3	4	Very confident
9.Express my concerns about each choice	Not at all confident	0	1	2	3	4	Very confident
10.Ask for advice	Not at all confident	0	1	2	3	4	Very confident

Appendix G: Religious Coping Activities Scale

Please take a moment to answer the statements that best describe how to cope with religious activities.

	Not at all	Somewhat	Quite a bit	A great deal
1. Looking for a stronger connection with God.	1	2	3	4
2. Sought God's love and care.	1	2	3	4
3. Sought help from God in letting go of my anger.	1	2	3	4
4. Tried to put my plans into action together with God.	1	2	3	4
5. Tried to see how God might be trying to strengthen me in this situation.	1	2	3	4
6. Asked forgiveness for my sins.	1	2	3	4
7. Focused on religion to stop worrying about my problems.	1	2	3	4

8. Wondered whether God had abandoned me.	1	2	3	4
9. Felt punished by God for my lack of devotion.	1	2	3	4
10. Wondered what I did for God to punish me.	1	2	3	4
11. Questioned God's love for me.	1	2	3	4
12. Wondered whether my church had abandoned me.	1	2	3	4
13. Decided the devil made this happen.	1	2	3	4
14. Questioned the power of God	1	2	3	4

Appendix H: Dr. Pargament Permission

Letter



BOWLING GREEN STATE UNIVERSITY

Department of Psychology

September 27, 2015

Senetta Hunt-Coleman
P. O. Box 1141
Newberry, Florida 32669

Dear Ms. Hunt-Coleman:

I am writing this letter to give you permission to use my Religious Coping Activities scale for your research. Please feel free to contact me if you have any questions, and please keep me posted on your findings.

Sincerely,

A handwritten signature in black ink that reads "Kenneth Pargament". The signature is written in a cursive style with a long horizontal stroke at the end.

Kenneth I. Pargament, Ph. D.
Professor Emeritus

Appendix I: Letters to Pastors

Dear Pastors:

My name is Senetta Hunt-Coleman, and I am a Ph.D. candidate at Walden University. I need your help in finishing my dissertation. My dissertation research examines the decision of African American Women to Undergo/Forego Breast Reconstruction after Mastectomy.

I need 88 African-American women to complete a ten-minute survey. In return each participant who completes the survey will receive a \$5 gift card for participating in the study. All of the women must live in Florida, be African American, be a part/member of a Christian church, be age eighteen and/or up, and have had a breast mastectomy of any type to participate in the study. I am asking you or your designated person to place surveys in a visible location for participants in your congregation and organization to read about the study.

This study will give African-American women an opportunity to voice their opinion the reasons they undergo/ forego breast reconstruction after mastectomy. Additionally, it will educate practitioners. Contact me with any questions and/or concerns you may have. I may be contacted via the information in the letterhead. Thank you for your consideration.

Sincerely,

Appendix J: Signed Letters

[Redacted]

Date 5/15/16

Dear [Redacted]

Based on my review of your research proposal, I give permission for you to conduct the study entitled Factors Associated with the Decision of African American Women to Undergo/Forego Breast Re-construction after Mastectomy within our church. As part of this study, only the principal investigator will be recruiting African American women, age 18 and up to participate in completing surveys for your study. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: Informing potential participants about the study by handing out informational flyers as well as how to get in contact the principal investigator for recruitment. The designated area will be provided by the pastor or church affiliate. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely [Signature]

[Redacted]

[Redacted]

Date 5/14/2016

Dear [Redacted]

Based on my review of your research proposal, I give permission for you to conduct the study entitled Factors Associated with the Decision of African American Women to Undergo/Forego Breast Re-construction after Mastectomy within our church. As part of this study, only the principal investigator will be recruiting African American women, age 18 and up to participate in completing surveys for your study. Individuals' participation will be voluntary and at their own discretion.

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I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely

[Redacted]



Date 5/15/2016

Dear 

Based on my review of your research proposal, I give permission for you to conduct the study entitled Factors Associated with the Decision of African American Women to Undergo/Forego Breast Re-construction after Mastectomy within our church. As part of this study, only the principal investigator will be recruiting African American women, age 18 and up to participate in completing surveys for your study. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: Informing potential participants about the study by handing out informational flyers as well as how to get in contact the principal investigator for recruitment. The designated area will be provided by the pastor or church affiliate. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.



[Redacted]

Date: 5/11/16

Dear

[Redacted]

Based on my review of your research proposal, I give permission for you to conduct the study entitled Factors Associated with the Decision of African American Women to Undergo/Forego Breast Re-construction after Mastectomy within our church. As part of this study, only the principal investigator will be recruiting African American women, age 18 and up to participate in completing surveys for your study. Individuals' participation will be voluntary and at their own discretion.

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I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely

[Redacted]

[Redacted]

Date:

Dear [Redacted]

Based on my review of your research proposal, I give permission for you to conduct the study entitled Factors Associated with the Decision of African American Women to Undergo/Forego Breast Re-construction after Mastectomy within our church. As part of this study, only the principal investigator will be recruiting African American women, age 18 and up to participate in completing surveys for your study. Individuals' participation will be voluntary and at their own discretion.

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I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

[Redacted Signature]

Letter of Cooperation



Date: 4/18/2017

Dear 

Based on my review of your research proposal, I give permission for you to conduct the study entitled Factors Associated with the Decision of African American Women to Undergo/Forego Breast Re-construction after Mastectomy within our church. As part of this study, only the principal investigator will be recruiting African American women, age 18 and up to participate in completing surveys for your study. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: Informing potential participants about the study by handing out informational flyers as well as how to get in contact the principal investigator for recruitment. The designated area will be provided by the pastor or church affiliate. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

