Hysterectomy and Self-Esteem Among African American Women

by

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Chapter 1: Introduction to the Study

Introduction

Hysterectomy is the second most performed surgery in women between 18 and 64 years in the United States (Robinson et al., 2017). Several studies have shown that Black women are more likely to be diagnosed and treated for hysterectomy than any other ethnic group in the United States (Augustus, 2002; Dillaway, 2016; Eltoukhi et al., 2014; Robinson et al., 2017). A single major study conducted by Robinson et al. (2017) noted that in 2012, the Centers for Disease Control and Prevention (CDC) reported significant racial variation in the prevalence of hysterectomy in the United States. Robinson et al. reported that in the United States, among women 48 to 50 years of age, 33% of Blacks, 23% of Whites, 22% of Hispanics, and 9% of Asians had had hysterectomies. Of the over 600,000 hysterectomies performed in the United States every year, African American or Black women have the highest rate of hysterectomy (Fortin et al., 2018).

Studies have shown that African American women are more likely to encounter hysterectomy-related problems with their spouses or significant others than Caucasian women (Williams & Clark, 2004). The CDC estimated that about 20 million U.S. women have had hysterectomies that may have had an impact on their partners and significant others (Askew & Zam, 2013). Studies have shown that African American women are young when diagnosing and treating hysterectomy despite being disproportionately affected by hysterectomy. Black or African American women are more likely to undergo a series of depressive symptoms such as low self-esteem and diminished self-satisfaction due to hysterectomy in the United States (Augustus, 2002; Cabness, 2010; Cohen et al.,

2911; Dillaway, 2016). Hysterectomy is not only problematic for women, especially African American women; it is also a significant problem for the public health discipline, as billions of dollars are spent each year on hysterectomy-related surgeries. The focus of this study was to investigate the relationships between an African American woman's decision to have a hysterectomy and specific factors, including self-satisfaction, the partner's perceptions and attitudes about hysterectomy, and the African American woman's socioeconomic status.

Background of the Study

Hysterectomies are significant among African American women (Askew & Zam, 2013; Bower et al., 2009; Kadhel et al., 2019; Stewart et al., 2018). According to Martins et al. (2013), some African American cultures perceive the uterus as the symbol of reproduction and feminism; as such, its removal may trigger emotional distress leading to low self-esteem and satisfaction. Women who have had hysterectomies may experience feelings of hopeless despair, depression, and feelings of being rejected, which, in some cases, may affect their health and psychological well-being (Pinar et al., 2012). Dillaway (2016) suggested that because hysterectomy requires removing the uterus, thereby disabling women's ability to have children, adolescent African American women might not be self-satisfied with the surgery outcome compared to older African American women. One of the aspects responsible for a woman's self-satisfaction in life is her body's functionality, including her sexual functionality and other feminine biological representation, such as her uterus and childbearing abilities (Nemati & Weitkamp, 2020). African American women who have had hysterectomies, especially at a younger age,

may show significant pessimistic feelings and perceptions about the surgery (Askew & Zam, 2013; Augustus, 2002; Cohen et al., 2011; Shimizu et al., 2011). Some African American cultures construe hysterectomy as a negative omen (Martins et al., 2013; Augustus, 2002).

Acceptance, rejection, and social support play a significant role in human behavior, especially when the support or rejection comes from a partner or significant other. Kavanagh et al. (2014) found that as opposed to acceptance, spousal rejection decreases self-esteem, which may systematically cause a reduction in African American women's self-satisfaction or self-esteem. A similar study by Zhang et al. (2015) confirmed the same notion about possible low self-esteem or satisfaction due to hysterectomy. The study indicated that longing for positive social relationships is one of the most pervasive and fundamental human needs. According to the study, rejection elicits self-referencing cognitions that command an individual social worth.

Some African American people, especially African American women's spouses, have strong cultural beliefs and negative perceptions about hysterectomy (Augustus, 2002). Evidence suggests that some African American men believe that hysterectomy can change feminine qualities such as sexual functionality and other characteristics of womanhood (Augustus, 2002; Williams & Clark, 2000). Therefore, most African American women believe that their spouses may reject or even end their relationship if they find out that they have had a hysterectomy (Askew & Zam, 2013). Studies by Askew and Zam (2013) and Richter et al. (2000) also posited that some African American men not only have limited knowledge and understanding of hysterectomy; but

also show little or no concern about the feelings of hysterectomized African American women, thereby leaving most of the surgical decision making to the women. Some African American women may avoid telling their spouses about their decision to undergo a hysterectomy (Askew & Zam, 2013; Dillaway, 2016; Richter et al., 2000). The decision to exclude African American spouses from hysterectomy decision making by African American women may sometimes backfire and cause conflicts of interest, disagreements, and termination of relationships (Augustus, 2002; Askew & Zam, 2013). A study by Dillaway (2016) confirmed that fear of disagreements, rejection, and abandonment by African American women's spouses contributes to why some African American women elect a hysterectomy without informing their significant others. Consequently, researchers argued that some African American men's negative perceptions about hysterectomy might be linked to their attitudes and decisions to terminate or reject their spouses who have had the surgery (Augustus, 2002; Williams & Clarke, 2004).

According to Martin et al. (2013), the primary component of a woman's happiness and self-satisfaction in life, especially for African American or Black women, is the proper functionality of her feminine body, which includes but is not limited to her social status and the biological functions of her body. The uterus is one of the primary reproductive organs in a woman. Removing it by hysterectomy may result in a series of negative feelings such as low self-esteem and satisfaction. Robinson et al. (2017) confirmed and supported the previous author by positing that social scientists had failed to dedicate enough time to comprehensive studies about surgical menopause, even when

studies had shown that African American or Black women have the highest rate of surgical menopause in the United States.

The gap in African American women's hysterectomy experiences includes but is not limited to the lack of current data on African American women's hysterectomy experience (Cohen, 2011; Palmer et al., 1999; Miles & Malik, 1994). While there are several studies on hysterectomies in general, very few current studies exist on African American women who, according to studies, are known to have the highest rate and incidence of hysterectomy in the United States (Robinson et al., 2017; Palmer et al., 1999; Qi et al., 2013). There are very few studies in literature concerning African American women and their perceptions about hysterectomies. These studies date back between the 1900s and 2002. A study conducted by Dillaway (2016) also confirmed the lack of current studies in this area. Dillaway (2016) noted that part of this significant gap is due to most social science researchers concentrating on women's natural menopause experience rather than artificial menopause or hysterectomy, especially African American women. Several authors have suggested more studies investigating the impact of hysterectomies and how women, especially African American women, feel about the surgery (Askew & Zam, 2013; Dillaway, 2016; Augustus, 2002; Richter et al., 2000).

Problem Statement

Hysterectomy is the second most performed surgery in women between 18 and 64 years in the United States (Dillaway, 2016; Kjerulff et al., 2000; Robinson et al., 2017; Williams & Clark, 2000). In the United States, women receive 600,000 hysterectomies every year (Askew & Zam, 2013; Doll et al., 2016; Rivera Drew, 2013; Wright et al.,

2013). African American women of reproductive and childbearing age have not only the highest indication of hysterectomy and symptoms, but also the highest rate of hysterectomy compared to other ethnic groups (Alerts et al., 2020; Dean et al., 2016; Dillaway, 2016; Ezzat, 2019; Robinson et al., 2017). Although African American women are more likely to be treated with hysterectomy than any other ethnic group in the United States (Augustus, 2002; Dillaway, 2016; Eltoukhi et al., 2014; Robinson et al., 2017), many of them refuse a hysterectomy (Augustus, 2002; Bower et al., 2009; Dillaway, 2016; Martins et al., 2013; Qi et al., 2013; Richter, 2000; Richter et al., 2002). The general problem is that social, psychological, and emotional factors impact the decision making regarding a hysterectomy by African American women (Augustus, 2002; Pinar, Okdem, Dogan, Buyukgonenc, & Ayhan, 2012; Qi et al., 2013). The specific problem is that it is unknown whether self-satisfaction, the partner's perceptions and attitudes about hysterectomy, and an African American woman's socioeconomic status affect an African American woman's decision to receive a hysterectomy (Dillaway, 2016; Williams & Clark, 2000).

Purpose of the Study

The purpose of this quantitative study was to explore whether the election of hysterectomy by African American or Black women aged between 30 and 65 years is associated with (a) self-satisfaction, a component of self-esteem; (b) the partner's perceptions and attitudes about hysterectomy; and (c) African American women's socioeconomic statuses. Findings from this study may help in understanding the impacts and experiences of African American women who have had the surgery, may increase

positive patient-physician relationships, and may assist healthcare organizations and physicians in designing appropriate future treatment options with different cultural groups in mind. The way that members of the African American community behave or feel about hysterectomy may be different from the way in which Caucasian or Asian women behave or feel, including how people feel about the same procedure. Using the Rosenberg Self-Esteem Scale (RSES) and Marvan's Beliefs and Attitudes Toward Hysterectomy (BATH) questionnaire, this study measured the association between hysterectomy and self-satisfaction among African American women. The study's dependent variable was hysterectomy decision making, and the independent variables were as follows:

- self-satisfaction
- the partner's perceptions and attitudes about hysterectomy
- socioeconomic status

Research Questions and Hypotheses

The research questions were designed and selected to answer the study questions and hypotheses. The goal was to find an association between the dependent, independent, and covariates and a hysterectomy. Below are the three research questions and hypotheses of the study.

RQ1: Is there an association between feelings of self-satisfaction, a component of self-esteem, and hysterectomy among Black or African American women ages 30– 65 years, as measured by the Rosenberg Self-Esteem

Scale (RSES) while controlling for educational attainment, marital status, and work status?

*Ho*1: There is no association between feelings of self-satisfaction, a component of self-esteem, and hysterectomy among Black or African American women ages 30–65 years, as measured by the RSES while controlling for educational attainment, marital status, and work status.

*Hα*1: There is an association between feelings of self-satisfaction, a component of self-esteem, and hysterectomy among Black or African American women ages 30–65 years, as measured by the RSES while controlling for educational attainment, marital status, and work status.

RQ2: Is there an association between the partner's perceptions and attitudes about hysterectomy among Black or African American women ages 30–65 years, as measured by the Beliefs and Attitude Towards Hysterectomy (BATH) Questionnaire, while controlling for educational attainment, marital status, and work status?

*Ho*2: There is no association between the partner's perceptions and attitudes about hysterectomy among Black or African American women ages 30–65 years, as measured by the BATH Questionnaire, while controlling for educational attainment, marital status, and work status.

*Hα*2: There is an association between the partner's perceptions and attitudes about hysterectomy among Black or African American women ages 30–65 years, as measured by the BATH Questionnaire, while controlling for educational attainment, marital status, and work status.

RQ3: When controlling for socioeconomic statuses (education, income, and occupation), is there an association between positive attitudes toward "self" and hysterectomy among Black or African American women ages 30–65 years, as measured by the RSES?

*Ho*3: When controlling for socioeconomic statuses (education, income, and occupation), there is no association between positive attitudes toward self and hysterectomy among Black or African American women ages 30–65 years, as measured by the RSES.

*Hα*3: When controlling for socioeconomic statuses (education, income, and occupation), there is an association between positive attitudes toward self and hysterectomy among Black or African American women ages 30–65 years, as measured by the RSES.

Theoretical Framework

The theoretical framework for this study was based on sociometer theory (ST). Though many theories explain characteristics of mating behaviors such as social acceptance, rejection, and self-satisfaction, ST has been the fundamental theory of self-esteem. The theoretical concept of ST was based on the work of Leary and Downs

(1995). However, the approach was later modified by Kirkpatrick and Ellis in 2007. Reitz et al. (2016) posited that ST is the most pertinent theory of self-esteem or satisfaction. According to the study, self-esteem or self-satisfaction reflects an individual's relational value within a group. Study shows that humans are motivated to form and maintain meaningful social relationships or attachments within a group (Zhang et al., 2015). Self-esteem or satisfaction may increase, or decrease based on whether an individual is liked, disliked, accepted, or rejected within a social group (Reitz et al., 2016). Mahadevan et al. (2019) postulated that ST is an inclusion- or exclusion-regulating theory that explains social behaviors such as African American women's feelings of being excluded or rejected by their spouses and significant others because they decided to elect a hysterectomy. Signs of social rejection within a social circle or companionship may lead to high or lowered self-esteem and satisfaction (Mahadevan et al., 2019).

Partner selection and rejection constitute a dynamic process, and ST is the most feasible tool with new perspectives for studying mating and its underlying characteristics (Zhang et al., 2015). Magro et al. (2018) postulated a similar hypothesis, asserting that ST has shown that self-esteem measures an individual's social belongingness by monitoring the success and failures of social interactions. Many studies indicate that Black or African American women who have had a hysterectomy may be subjected to diminished feelings due to African American men's perceptions about surgical menopause (Augustus, 2002; Cabness, 2010; Marvan & Lopez-Castillo, 2012; Richter et al., 2000; Williams et al., 2000). Augustus (2002) noted that some African American women strongly believe that their spouse would terminate their relationship if they found

out that they had a hysterectomy. The same study asserted that some African American men extrapolate negative views and perceptions about hysterectomy and sometimes utter derogatory remarks toward African American spouses who have had hysterectomies (Augustus, 2002; Richter et al., 2000 & Cabness, 2010). According to Augustus (2002), no matter how significant an African American woman's health issue may be, their major fear hinges around their spouses and the possibility of rejection or abandonment. As a result, some African American women would rather hide their decision to have a hysterectomy than tell their spouse. Due to the stigmas and cultural beliefs tied around hysterectomy by African American culture, Black or African American women who undergo hysterectomy may have emotional issues leading to low self-esteem and or self-satisfaction (Augustus, 2002).

Nature of the Study

This study explored the impact of hysterectomy on self-esteem, self-satisfaction, or spousal rejection toward African American or Black women who have had menopausal surgery or hysterectomy. This study explored the predictive relationship between hysterectomy (surgical menopause) and feelings of self-satisfaction, a component of self-esteem among African American women 30 to 65 years of age following a hysterectomy. One independent variable, three dependent variables, and three covariables were identified. The independent or critical variable in all three research questions was hysterectomy. The dependent variables were as follows:

- *Self-satisfaction or self-esteem*: This study reviewed, in general, how satisfied or dissatisfied African American women may be after a hysterectomy based on their general perception and experiences before and after a hysterectomy.
- *The partner's perceptions and attitudes about hysterectomy*: Studies have shown that Black or African American women strongly believe that their partner or significant others may abandon a relationship or even reject them if they find out that the woman elected a hysterectomy (Augustus, 2002; Marvan et al., 2009).
- *How socioeconomic statuses might make a difference*: Socioeconomic variables are other circumstances that can impact Black or African American women before and after having a hysterectomy. The three primary socioeconomic conditions are (a) education, (b) income, and (c) occupation or place of work.

The study explored how educational attainment, income, and occupation can play a significant role in African American women's decision making about hysterectomies. According to Marvan et al. (2009), socioeconomic statuses may play an important role in African American women's decision making about hysterectomy. The three covariables in the study were educational attainment, marital status, and work status.

For the study sample data, I relied on surveys from African American women affiliated with the Survey Monkey Audience Pool. The pool allows researchers to choose a population of interest by adding filters in this case, to select qualified candidates from the United States who had had a hysterectomy.

Definitions of Key Terms

Some terms used in the study have interchangeable meanings that may depend on use or applicability. Below are the definitions of some of these critical terms.

Hysterectomy: Hysterectomy is defined as the surgical removal of the uterus or uterine leiomyoma. According to Schwab (2001), the four major types of hysterectomies are (a) total, (b) modified, (c) radical, and (d) extended radical hysterectomies.

Total hysterectomy: This is defined as the uterus's resection without removing the uterine ligaments (Schwab, 2001).

Modified hysterectomy: An intermediate resection between total hysterectomy and radical hysterectomy (Schwab, 2001).

Radical hysterectomy: Radical hysterectomy is defined as the resection of the uterus in addition to the anterior, posterior, and lateral uteri ligaments (Schwab, 2001).

Extended radical hysterectomy: Defined as removing the internal iliac or the inferior gluteal and internal pudendal arteries during the surgery (Schwab, 2001).

Childbearing or reproductive age: Parker et al. (2013) posited that in general, the childbearing age among women is 18–45 years. However, Geronimus et al. (1993) showed that African American women's childbearing age may be much earlier than 18.

Self-esteem: According to Keith and David (2001) and Kirkpatrick & Ellis (2001), self-esteem is defined as an appraisal of one's value. Self-esteem can be high or low; however, low self-esteem is a risk factor for depression, with high self-esteem having the opposite effect. Studies have shown that African American women who have had

hysterectomies can be subjected to low self-esteem or self-satisfaction (Augustus, 2002; Cohen et al., 2011).

Self-satisfaction: This is a component of self-esteem and is defined in the case of this study as satisfaction from outcomes of hysterectomy among African American women in terms of partner acceptance or rejection, self-esteem, and other reactions toward the spouse or significant others after a hysterectomy. For example, while studies have shown that generally, most women are happy with the outcomes of hysterectomy, some African American women report the opposite due to their feelings and perceptions after the surgery (Askew & Zam, 2013; Weber et al., 1999; Schofield et al., 1991; Pitter et al., 2014). According to Weber et al. (1999), although some women may report high satisfaction rates after hysterectomy, studies have shown that Black women may not get the type of social supports needed from their spouses and significant others that White women receive, which sometimes may lead to dissatisfaction with having a hysterectomy.

Indications for hysterectomy: Symptoms of a disease that warrant the use of hysterectomy as a treatment option. Uterine leiomyomas such as excessive bleeding and pelvic pain among African American women may account for the indication of about 30% of hysterectomies (Carlson et al., 1993). According to Eltoukhi (2014), uterine leiomyomas are more common among African American women.

Surgical modalities: The modes or manners in which hysterectomies are removed, which include but are not limited to (a) abdominal, (b) robotic, (c) vaginal, and (d) laparoscopic methodology (Pitter et al., 2014).

Period: According to Merriam-Webster (n.d.), a period represents a particular historical moment in time. It is a length of time between one event and another, such as women's menstrual monthly flow or a period in their lives (Stanley, 1975). The word was used interchangeably in this study, denoting women's menstrual occurrences and the time in African American women's lives when they are believed to be capable of becoming pregnant and having children.

Leiomyoma: Leiomyoma is another term for fibroids. These words are synonymous and used interchangeably in science. Leiomyomas are smooth muscle noncancerous neoplasms that grow from organs in the body or structures such as the uterus (Mendrek et al., 2018).

Assumptions

A few assumptions provided the basis of this study. It was assumed that African American or Black women who had had a hysterectomy would be willing to fill out the survey in good faith. Moreover, I assumed that participants who would be filling the survey from Survey Monkey would be working independently from home. I did not have the chance to meet or speak with any of the participants. As such, it was assumed that they were genuine African American or Black women who had been treated with a hysterectomy at some point in their lives. In theory, anybody can claim to be a member of a race or ethnicity of interest and take a survey for which they do not qualify, leading to selection bias. It was also assumed that the participants would be honest and indicate their true feelings, perceptions, and experience when they had a hysterectomy. If participants filled out the survey honestly, indicating their experience and feelings, the

study could help advance knowledge and social change among African American women considering electing a hysterectomy in the future. It may help healthcare providers design successful future hysterectomy procedures, unite African American families, and eschew feelings of rejection and possible abandonment due to a hysterectomy. The outcome may help African American men understand why hysterectomy is necessary and support their loved ones during the procedure. It was also assumed that by combining the RSES and Marvan's BATH questionnaires, it would be possible to find answers to the three research questions in this study.

Scope and Delimitations

This study was focused on the impact of hysterectomy on self-esteem or self-satisfaction among African American women 30 to 65 years of age. The inclusion criteria for the study were as follows:

- African American or Black women 30 to 65 years of age
- African American women who were diagnosed and treated for hysterectomy
- African American women who were either married or were in a relationship during the time of their hysterectomy

The age group chosen for this study was inclusive. It allowed me to conduct a detailed review of African American women who had hysterectomies during their pre- and postmenopausal eras. By targeting this age group, I was able to provide a detailed analysis of two groups of African American women's feelings, experiences, and perceptions. The first group consisted of African American women of reproductive childbearing age. In contrast, the second group consisted of African American women

who could no longer have children or were outside childbearing age. The way in which African American women of childbearing age perceive hysterectomy may differ from how women of postmenopausal age perceive the same surgery (Dillaway, 2016; Augustus, 2002; & Groff et al., 2000). Excluded from the study were women who were not of African American or Black descent and African American women younger than 30 or older than 65 years. The study also explored how hysterectomy may have impacted African American women's relationships with their spouses and significant others. African American women have the highest rate of hysterectomy indications and, as such, have the highest rate of hysterectomy in the United States (Augustus, 2002). ST was used to align the study results with pre-established studies. ST is the theory of self-esteem or self-satisfaction.

Limitations

A significant limitation of this study was the data collection source and methodology. It was almost impossible to find a secondary data source for the study. The primary reason was that few or no current studies in the literature emphasized African American women's perceptions, experience, and feelings during and after a hysterectomy.

My desire to conduct this study was intensified by the lack of current studies on African American women's hysterectomies, along with the fact that African American women have the highest rate of hysterectomy in the United States (Augustus, 2002; Dillaway, 2016). It was tough to find a secondary data source for this study because little or no data existed on African American women and their hysterectomy experience. That

led to the decision to conduct the research using a primary data collection approach involving Survey Monkey. Survey Monkey data collection methodology permits researchers to filter and collect data from various participants, including African American women who have had hysterectomies.

One known disadvantage of online survey questionnaires is reliability. However, a major study by Hunter (2012) showed that online data collection's disadvantages are increasingly becoming rare because of the latest technological innovations. Even with this assurance, the possibility of biased data due to a lack of control over the collection population may be a significant limitation. Bias and adulteration of data may arise from individual misrepresentation or repeated participation by a single participant. Other participant-associated limitations may arise from data inconsistency and incomplete and inaccurate survey data (Hunter, 2012).

It is evident that using Survey Monkey and filtering data based on African American women within a specified age group may have limited the study results. African American women outside the specified age group will not benefit from the study. The participant selection criteria also excluded women from other ethnic groups, resulting in the inability to generalize the study's findings to every woman who has had a hysterectomy in the United States.

An additional limitation of the study may have come from the use of the RSES. Though the RSES is one of the most widely used questionnaires for self-esteem studies, some authors have challenged its validity in the past. One of the challenges to the RSES involves the degree to which the scale is reliable enough to represent the questionnaires

(Wallace, 1998) effectively. The RSES has been tested and is widely used. Study has shown that the RSES is efficient, effective, and reliable (Ciarrochi & Bilich, 2006). Other studies have also posited that the RSES is robust, with an internal consistency of 97% in reliability (Ciarrochi & Bilich, 2006).

The final potential limitations of the study may be linked to the design characteristics. This study used a cross-sectional methodology to investigate the association between hysterectomy and self-esteem or self-satisfaction among African American or Black women. This design or approach, however, is known to have few limitations, such as (a) lack of direct estimation of risk and (b) selection-related bias (Pannucci & Wilkins, 2010). These limitations were all considered and addressed effectively during the study's planning phase.

Significance of the Study

According to Williams and Clark (2000), more studies are required to understand African American women's hysterectomy experience after surgical menopause, also referred to as hysterectomy. One primary reason for conducting this study was to fill existing gaps in the understanding of African American women's feelings and perceptions before and after a hysterectomy. A known characteristic of hysterectomy is the inability of hysterectomized women to become pregnant and have children, which can be problematic for both women and their spouses. As a result, Augustus (2002) noted that extensive studies are required to identify African American women's perceptions of a hysterectomy and how their spouse's attitudes toward hysterectomy may impact their decision making. The study may also reflect how socioeconomic factors may help

reshape African American women's hysterectomy perceptions. Scholars have reported that (a) more African American women are diagnosed and treated for hysterectomies than women of any other race, (b) African American women report more negative perceptions concerning hysterectomies than any other race in the United States, and (c) African American men are likely to terminate a relationship because their partner elected to have a hysterectomy (Augustus, 2002; Martins et al., 2013; Williams & Clark 2000).

African American or Black women may experience severe low self-esteem, feelings of degradation, and social exclusion, especially from their spouses and significant others, after having a hysterectomy. This study used public health prongs to identify and develop possible solutions for African American families considering future hysterectomies. Though this study was solely about Black or African American women and their hysterectomy experience, it may also help African American men understand why it is necessary to support their spouses during the difficult time of hysterectomy. African American women undergo hysterectomies because they have significant health problems. Through this study, their spouses and significant others may understand the need for surgery and support their spouses rather than abandoning or rejecting them.

Significance of Social Change

Studies have shown that the effects of hysterectomy are more pronounced in the United States than in other countries around the globe (Robinson et al., 2017 & Moawad et al., 2017). According to these studies, over 600,000 hysterectomies are performed each year in the United States, and African American women have the highest hysterectomy incidence. *The New England Journal of Medicine* has predicted that by the age of 60

years, over one third of women in the United States will have had a hysterectomy performed (Dimri & Jiniswale, 2016; Pokras & Hufnagel, 1998). The same study indicated that although hysterectomy is on the decline due to technological innovations, the cost of performing hysterectomies has risen significantly. According to Cabness (2010) and AlAshqar (2020), hysterectomy is one of the most performed procedures in the United States, affecting 5 million or more women. Research has also shown that hysterectomy is a significant public health concern that needs to be addressed (Afiyah et al., 2020). The hysterectomy rate is higher for African American women than for their white counterparts or any other race in the United States, yet there has been very little epidemiological research and data on African American women's experiences (Cabness, 2010; Williams et al., 2000; Miles & Malik, 1994; Palmer et al., 1999).

The critical social significance of this study is twofold. First, this study addresses how African American women's major fears may lead them to delay having a hysterectomy or to refuse to tell their spouses and significant others about the surgery. African American or Black women's primary fear may be losing their loved ones or spouses. This study may help healthcare providers and hospitals develop proper unification programs that will involve African American women's spouses. Such programs may educate men by empowering them to be more supportive during this critical time in their spouses' lives. It may provide a basic understanding of hysterectomy as an essential procedure needed to save the lives of women diagnosed with life-threatening indications of hysterectomy, such as uterine fibroids and heavy bleeding.

Second, studies have shown that some African American women may be impacted by low self-esteem and self-satisfaction due to the loss of the uterus and other significant reproductive organs of womanhood (Marvan & Lopez-Castillo 2011; Cabness, 2010 & Augustus, 2002). This study may help hospitals provide necessary information about hysterectomy and properly educate African American women on various hysterectomy alternatives. Proper education on hysterectomy and its relevant outcomes may prepare African American families with an understanding of how hysterectomy may impact their quality of life (QOL) and how they can eschew or manage future instances of low self-esteem and dissatisfaction before and after a hysterectomy.

Summary and Transition

Though hysterectomy is a global problem, studies have shown that hysterectomy is more problematic in the United States than in most other countries (Robinson et al., 2017 & Moawad et al., 2017). African American women in the United States tend to have more hysterectomies. Not only is hysterectomy more prevalent among African American women, but it also affects Black or African American women at their young, reproductive, and childbearing ages. Some African American men see a hysterectomy as a significant challenge and, in some cases, this perception may lead them to reject their spouses and significant others who have had the surgery. Some African American women feel isolated from their spouses, causing significantly low self-esteem and satisfaction after surgery. One of the potential benefits of this study is the reduction of these negative feelings.

My aim in this chapter was to express the importance of conducting a study of African American women who have elected hysterectomies and how their male counterparts react to the procedure. This study was necessary to help the public health field by addressing the lack of current studies on African American women's hysterectomy experience.

The breakdown of the subsequent chapter is as follows: in Chapter 2, I will review the literature relevant to the problem in question. In particular, majority of the studies reviewed in the chapter will be current, that is, studies published in 2017 and beyond to contextualize the problem as something that is current and actually impacts African American women as defined in the problem section. The reviewed studies will seek to approve the existence of the problem space, gap in research and the need for this particular study or dispute the existence of the identified problem. The chapter will end by a summary of the reviewed studies and a transition to the next chapter. In Chapter 3, I concentrate on the research design that I used in this study and the rationale for using it. One significant function of a research design is to help answer a study's research questions. Chapter 3 also contains a review of the methodology, or the sampling approach used in data collection. Other significant aspects of Chapter 3 include the validity and appropriateness of the data used and how the data were analyzed. Finally, ethical problems, mostly in studies with human participants, are discussed in this section. I describe the procedures used in data collection and how I handled confidentiality and human rights protection. All data collection occurred through online surveys of African American women who had been treated with a hysterectomy at some point in their lives.

Chapter 4 will present the findings of quantitative analysis as obtained from the procedure described in Chapter 3. In Chapter 5, the last chapter of this research, I will present a discussion of the findings and how they relate to existing literature. In the chapter I will present an in-depth discussion of the implications of the study together with the recommendations, summary and limitations experienced during the course of the study.

Chapter 2: Review of Literature

Introduction

Hysterectomy is the most common gynecological surgery performed on women in the United States (Qi et al., 2013). Of over 600,000 hysterectomies that are performed every year in the United States, studies have shown that African American women have the highest risk of hysterectomy compared to other ethnic groups (Askew & Zam, 2013; Bower et al., 2009; Comforth, 2019; Dillaway, 2016; Gibson et al., 2012; Rivera Drew, 2013; Qi et al., 2013). According to Stewart et al. (2013), a significant indication for hysterectomy is uterine fibroids. Studies have posited that uterine fibroid impact African American women more than women of any other race in the United States (Ekpo et al., 2012; Eltoukhi et al., 2013; Stewart et al., 2013;). As a result, African American women also tend to have the highest prevalence of hysterectomy relative to all other racial groups in the United States.

A study by Askew and Zam (2013) noted that compared to African American women, African American men have opposing views and perceptions about hysterectomy. According to the same study, some African American men are likely to reject their wives or significant others if they know that they have elected a hysterectomy. It is not uncommon for African American women to plan to receive a hysterectomy without telling their spouses or significant others because of the fear of being rejected or abandoned. However, keeping hysterectomy a secret from African American men can also result in confusion, depression, and low self-esteem and satisfaction among African American women. Most African American women would like to discuss and get the

support of their spouse and significant others during such a challenging time in their lives, but in some cases, they may be afraid to do so for fear of losing their loved one (Augustus, 2002). Though several studies have reported significant satisfaction from the outcome of hysterectomy by women in general, studies have shown that some African American women have negative feelings and perceptions about the surgery (Cohen, 2011; Moorman et al., 2011Miles & Malik, 1994; Palmer et al., 1999).

Studies have also indicated that African American women's satisfaction after a hysterectomy may depend on several factors. Such factors include but are not limited to the following: (a) length of stay at the hospital, (b) level of improvement during the recovery period after surgery, (c) the surgical modality used, (d) sexual functionality and quality of life, and (e) reception or rejection from their spouses after surgery (Askew & Zam, 2013; Pitter et al., 2014; Shimizu et al., 2011). Satisfaction with treatment outcomes after a hysterectomy may also be dependent on race or cultural group (Weber et al., 1999). A study by Pitter et al. (2014) and Askew and Zam (2013) noted that women generally reported a high satisfaction rate after a hysterectomy. However, some African American women may not feel the same way because they have been diagnosed with a hysterectomy at a younger age and/or lack the support of their spouses and significant others. An African American woman's feelings about hysterectomy may differ from those of Caucasians or other racial groups about the same surgery. Even among Black or African American women, satisfaction may vary by age, with differences between older African American women in the postmenopausal stage and younger women of

premenopausal and reproductive age (Cabness, 2010; Dillaway, 2016; Galavotti et al., 2000).

Overview of Relevant Contents

The purpose of this chapter is to provide an in-depth literature review related to hysterectomy as it applies to women of color in the United States. This chapter reviews detailed literature on African American women's self-esteem or satisfaction after a hysterectomy. The chapter also examines African American men's role in decision making during their spouse's hysterectomy experience. It also highlights African American women's fear about the possibility of being rejected by their spouses or even terminating their relationships because they have elected to have a hysterectomy. The impact and role of socioeconomic factors such as education, income status, and occupation relative to hysterectomies are also investigated.

This chapter is divided into sections by topic. The first section of the chapter addresses the literature search strategy, followed by standard definitions of relevant variables. The third section contains a description of the theoretical framework and how the framework was applied to the study. It also establishes the rationale and reason why the theory was chosen. In the fourth section, I describe relevant literature in detail. I also discuss significant gaps in current literature on African American women's hysterectomies. There has been a significant lack of existing research data on Black or African American women who have had hysterectomies. Studies have shown little or no data on African American women's hysterectomy experience (Cohen, 2011; Bower et al., 2009; Miles & Malik, 1994). This significant gap in the literature was one of the

motivational forces to do this study. The final section of the chapter constitutes the chapter summary. This last section brings the chapter to an end as the study transitions into Chapter 3, which addresses the methodology.

Literature Search Strategy

The Thoreau search index was used to pull needed historical background information on Black or African American women who have had hysterectomies. Significant searches were done to gain complete insight into how hysterectomy impacts African American women. Sources outside the health sciences and epidemiological institutions such as psychology, counseling, and social work databases were also searched. More searches on multiple databases were performed using Walden databases such as MEDLINE, ProQuest, EBSCO eBooks, Google, CINHAL, and Dissertations and Theses within and outside Walden University. Finally, current published and unpublished articles from major institutions such as Women's Health, CDC, and the National Institutes of Health (NIH) were reviewed. Keywords used in the search criteria included but were not limited to *hysterectomy*, *hysterectomy and African American or Black women*, *hysterectomy and Black women*, *hysterectomy and self-esteem*, *hysterectomy and self-satisfaction*, and *Rosenberg's self-esteem scale.* As volumes of databases were searched for articles on hysterectomy, it became noticeable that very few current articles or studies existed on this subject matter among Black or African American women.

Despite the numerous studies showing that hysterectomy is the second most performed surgery in the United States, with the highest incidence among Black or African American women, there are very few studies that reference this fact (Askew &

Zam, 2013; Augustus, 2002; Laferrere et al., 2002; Palmer, 1999). Previous studies on hysterectomies have shown that African American women seem to have lower priority than their White American women counterparts (Cohen, 2012; Laferrere et al., 2002; Shavers-Hornaday, 1997). A study by Palmer et al. (1999) confirmed this notion by stating that data on hysterectomies done by American women were highly diminished, and most available data was on White American women . Bower (2009) also noted that most studies are not population based. As a result, sample data are restricted. According to Bower, this dearth of studies on African American women may have contributed to a lack of proper attention to African American women's problems before and after a hysterectomy.

Specific searches regarding the impact of the feelings and perceptions of African American women and their spouses were conducted, as well as regarding the impact of socioeconomic status on hysterectomy. Four variables were identified and were included in an additional search. Key terms were *hysterectomy and African American women, hysterectomy and cultural beliefs*, *beliefs, and perceptions of African American or Black women,* and *hysterectomy and African American men or partners hysterectomy socioeconomic statuses.* As noted earlier, very few current studies were found using these searches. There is a need for more studies in this area.

Significant Key Variables of the Study

Hysterectomy

Hysterectomy is a gynecological surgery that involves removing the uterus and sometimes the cervix (Shimizu et al., 2011). Depending on the symptoms and surgical

plans, hysterectomy may include the removal of the fallopian tubes in addition to the ovaries, which are considered the female's major reproductive organs. According to Askew and Zam (2013), hysterectomy may involve removing the upper part of the uterus, otherwise known as the *fundus*. It may sometimes require removing the lower part of the uterus in addition to the ovaries (*oophorectomy*). In all cases, hysterectomy leads to permanent menopause in women, irrespective of the woman's age.

The two types of menopauses in women are (a) natural menopause and (b) induced menopause caused by a standard procedure medically known as hysterectomy. Studies have shown that the age at menopause may vary in women and can be linked to several factors such as the woman's geographic location, smoking characteristics, and racial and other factors (Dillaway, 2016; McKnight et al., 2011; Weiss et al., 2009). According to McKnight and his research team (2011), 95% of women aged 44 to 56 may begin their natural menopausal status, which may be marked by various symptoms such as delayed periods and hot flashes that may accompany diminished menstrual periods before the final period. Induced menopause, otherwise known as hysterectomy, involves the surgical removal of part of the uterus or the entire uterus. It can occur at any age, sometimes earlier than 30 years, especially for African American women. Thirty years of age among African American women is considered to be within the reproductive and childbearing period (Augustus, 2002; Lewis et al., 2000).

According to Dillaway (2016), hysterectomy leads to the cessation of women's cycle, defined by an entire range of bodily signs and symptoms. Groff et al. (2000), conducted a qualitative study that linked increased rates of hysterectomy among African

American women to the prevalence of leiomyomas or fibroids (Groff et al., 2000). According to Gracia and Carmona (2020), abnormal uterine bleeding and pain are sometimes common signs and symptoms of hysterectomy among African American women in the United States.

Self-Esteem

Self-esteem was defined by Rosenberg (1965) as a positive or negative attitude toward the self or a particular object. Coopersmith (1967) defined self-esteem as the extent to which an individual believes in their ability to be successful, capable, significant, and worthy. Self-esteem is one of the most studied and used psychological constructs studied independently as a motive, an outcome, or a moderator in psychological, behavioral hypotheses (Rajlic et al., 2019). Studies have shown that self-esteem was first introduced by William James in 1890, who had suggested that self-esteem resulted from individual behavioral successes divided by pretensions, values and goals (Flynn, 2016; Ziegler-Hill, 2013). According to Holden (2016), self-esteem is one of the most popular topics in modern psychological literature, with over 35,000 publications on the subject.

Self-esteem has been used to explain cause and effect to “self.” Research has noted that self-esteem is an exceptionally widely used but diverse construct that significantly predicts psychological well-being and combines successful interpersonal relationships with significant behavior regulation (Mandal & Moron, 2019). Certain personality factors can predict self-esteem and self-worth contingencies such as gender, age, religiosity, and other cultural elements (Mandal & Moron, 2019). Mandal and Moron

(2019) posited that self-esteem might increase or decrease in response to success or failures in the domains where self-esteem was invented. The considerable attention that has been allotted to self-esteem leads to a widespread interest in the construct, thereby linking self-esteem with various social problems such as drug abuse, academic underachievement, and public violence (Holden, 2016). For example, in 1990, a self-esteem movement was established in California to promote self-esteem and personal social responsibility with the bid of addressing the problem of self-esteem within the state of California (Holden, 2016). However, some authors have argued concerning the authenticity of self-esteem, leading to widespread debates about the value of the concept in recent years.

Proponents of the construct have argued that self-esteem is a fundamental construct associated with many important life outcomes (Holden, 2016). Holden (2016) and Flynn (2016) posited that self-esteem has been successfully used and remains one of the most used psychological constructs. The purpose of this study was to examine how African American women's self-esteem and satisfaction may be impacted by hysterectomy. The study also addressed how African American men's perceptions and attitudes toward women who have had a hysterectomy may negatively impact the women's physical and psychological well-being or decision-making regarding hysterectomy.

There are four types of self-esteem: (a) global self-esteem, (b) state self-esteem, (c) domain-specific self-esteem, and (d) trait self-esteem.

Global Self-Esteem

Global self-esteem refers to an overall aggregated opinion about oneself. It is a comprehensive assessment of the self, individual value, or self-worth (Rubeli et al., 2019). As in all domains of self-esteem, global self-esteem can be rated as high or low. Rubeli et al. (2019) cited a study by Sowislo and Orth (2014) positing that individuals with high global self-esteem tend to be more satisfied with their lives than individuals with low global self-esteem. According to their study, the most researched literature on self-esteem involves global domain self-esteem. Results from the study indicated that global self-esteem consists of an individual's positive or negative attitude toward the self as a whole instead of the parts that make up the whole. For example, a person who feels good in different aspects of his life may be more satisfied than someone who feels good in only one specific part of his life. Totality is the primary distinction between global self-esteem and other self-esteem domains, such as state self-esteem. Danneel et al. (2019) referred to global self-esteem as a general evaluation of oneself as a person. According to Rosenberg (1995), self-esteem can be differentiated by its characteristic striking consequences. Rosenberg contended, while specific self-esteems are more relevant to behavioral actions, global self-esteems are relevant to individual psychological well-being. Using the causal modeling hypothesis as a test protocol, Rosenberg confirmed the notion that global self-esteem is strongly related to psychological well-being measures. In contrast, specific self-esteems are used as a better predictor of academic performance.

State Self-Esteem

State self-esteem refers to the perception of changes in a person's social inclusion or exclusion level in a given setting. The primary aspect that differentiates and defines state self-esteem is its barometric or changing characteristics. While global self-esteem is much more stable, state self-esteem varies according to the areas in which the individual feels comfortable or satisfied with life. Heatherton and Polivy (1991) postulated that individuals with state self-esteem are subject to momentary changes in their lives. According to Heatherton and Polivy (1991), people's overall self-esteem is derived by averaging their positive and negative feelings about themselves across several social conditions.

There are two primary monitoring systems for self-esteem: (a) an immediate system and (b) a long-term monitoring system. State self-esteem involves monitoring a person's relational value, such as the degree to which they are accepted or rejected by others within a social setting (Leary & Downs, 1995). African American women who have had a hysterectomy may be subjected to state self-esteem. While feeling satisfied with the outcome of a hysterectomy, African American women's self-esteem and satisfaction may deteriorate based on the perception and feelings of their spouses or significant others because they may have elected to have their uterus removed. Studies have shown that African American men can abandon a relationship or reject their partners if they know that their spouses have had a hysterectomy (Askew & Zam, 2013; Augustus, 2002; Richter et al., 2000). State self-esteem refers to the perception of changes in a person's social inclusion or exclusion level, such as what may happen to

African American women when their spouse or significant others find out that they elected a hysterectomy. Leary and Downs (1965) posited that state self-esteem involves monitoring a person's relational value, such as the degree to which they are likely to be accepted or rejected by other social group members. According to Zhang et al. (2015), state self-esteem involves monitoring individual behaviors and the social environment for cues relevant to relational evaluations.

Domain-Specific Self-Esteem

Domain-specific self-esteem is like state self-esteem but differs slightly on specificity. Domain-specific self-esteem refers to a person's self-esteem within a specific area of life (Zhang et al., 2015). For example, it is possible for a person to have a high level of success in one specific area of life but rated a failure in other areas. Domain-specific self-esteem may refer to a person's high self-esteem in a particular domain, such as academic achievements but found to be low in other life domains (Zhang et al., 2015). Domain-specific self-esteem may concentrate on a particular achievement or failure in life, resulting in high or low self-esteem for that specific domain. As in the case of African American women, experiences in social acceptance or rejection feed into the domain-specific self-esteem criteria and depending on the domain, the African American woman's self-esteem may be referred to as being low or high (Zhang et al., 2015). Study shows that African American women who have had a hysterectomy may be subjected to low domain-specific self-esteem depending on their spouse's decision to accept or reject their wives or significant others after being elected hysterectomy (Augustus, 2002; Cohen et al., 2011).

Trait Self- Esteem

On the other hand, trait self-esteem involves how a person is accepted by a desirable group based on a valued trait. Trait self-esteem hinges on the relational partners that characterize their social inclusion or exclusion (Zhang et al., 2015). Trait self-esteem is the belief that certain individual traits are necessary for social inclusion or exclusion. For example, MacDonald et al. (2003), noted in a study that the interpersonal theory of self-esteem that ties individual perceptions of acceptability to other people depends on their specific traits. The study posits that self-evaluation may predict self-esteem to the point that an individual believes that a particular trait or attribute is necessary for acceptance or rejection within a social group. Considering that higher education, for example, is highly valued in the teaching profession, more positive self-evaluations on this relevant trait will demonstrate high trait self-esteem (MacDonald et al., 2003). In other words, the academic attribute, in this case, can result in the individual's success, pride, satisfaction and may lead to a high trait self-esteemed.

Self-Satisfaction

The desire to have sex and to fall in love are inseparable . Kawaguchi (2019) suggested self-satisfaction was related to a partner’s satisfaction. Kawaguchi said these were the points to consider when analyzing love, marriage, and reproduction difficulties. Kim et al. (2020) conducted a study to demonstrate the effects of transcutaneous electrical stimulation (TES) on bladder neck hypermobility, morphological characteristics, and psychological satisfaction in women with stress urinary incontinence.

Kim et al. indicated improving the stress urinary incontinence symptoms could lessen the women's self-esteem in social and psychological aspects.

Theoretical Foundation: Sociometer Theory

ST was the preferred theoretical framework for this study. The theory explains how people base their behavior and decision-making on their social groups' acceptance or rejection, especially within a cultural entity. ST is rooted in the work of Leary and Downs (1995). Kirkpatrick and Ellis later expanded the theory in 2007. Anthony et al. (2007), studied the ST of public health. The authors examined Sociometer's role in an individual's behavior. They hypothesized that self-esteem and satisfaction are based on social inclusion or exclusion within the social group. The study posited that ST explains people's self-esteem or self-satisfaction and can also be linked to individual health conditions and decision-making criteria. For example, the Sociometer theory can explain the impact of hysterectomy on African American women and their feelings and perceptions when they feel that they are being rejected by their social entity (Antony et al., 2007).Proponents of ST believe that people are not motivated to maintain their self-esteem but instead they seek to increase their relational values, associations, and social acceptance, using self-esteem or satisfaction as a gauge (Leary, 2005).

According to Leary (2005), interpersonal rejections are not only associated with negative and embarrassing social emotions; they can also lead to lowered self-esteem or self-satisfaction. ST examines the link between adolescents' self-esteem and the self with peer-perceived popularity in a socially diverse environment (Reitz et al., 2016). According to Reitz et al. (2016), ST proposes that self-esteem or satisfaction reflects a

person's relational value with other people; in other words, people do not live in a vacuum. People are social animals, and their self-esteem and satisfaction increase or decreases when they are liked or disliked by others within a social group. ST works on the pretext and assumption of social scientists, which posits that the most critical component of self-esteem lies in the interplay of individuals and their social group (Reitz et al., 2016).

Zhang et al. (2015), noted in their study that ST is a self-esteem theory that gauges interpersonal relationships. According to Shackelford and Weekes-Shackelford (2016), ST posits that a minimum level of social inclusion or belongingness is necessary for humans to reproduce, function, and survive with self-esteem functioning as a social meter. In other words, the self-esteem system is a social meter that monitors a person's interpersonal relationships, motives, and behaviors that allows the individual to maintain a minimum level of acceptance within a social group (Leary & Downs 1995). Humans are made to retain a basic need of belongingness; they are motivated to form and maintain a meaningful social attachment with one another (Zhang et al., 2015).

According to Leary and Downs (1995), ST is an internal monitor that measures the degree to which an individual is valued or disvalued as a relational partner. It is an internal gauge that measures how a person is accepted or rejected by a relational partner. This theory is similar to what African American women may undergo with their partners when they elect to have a hysterectomy. African American women may encounter self-esteem and satisfaction issues because they have decided to have a hysterectomy to help

treat symptomatic health issues such as fibroids, heavy bleedings, and other gynecological issues (Augustus, 2002).

Reeve et al. (2017) utilized ST in their study titled "The Effect of mate value feedback on women's mating aspirations and mate preference." The study noted that in addition to considering sexuality traits in partner evaluations and selection, both sexes consider other personal qualities such as making or having children. African American women see hysterectomy as a trait that can be problematic and possibly infuriate their significant others if they are aware that they have elected or considering electing the surgery (Williams & Clarke, 2000). According to Reeve et al. (2017), ST proposes that self-esteem is a byproduct of a multifaced regulatory system that enables people to form and maintain benefiting relationships by monitoring cues relevant to social domains. Augustus (2002) indicated that it was not uncommon for African American women to avoid telling their spouses or significant others about their intention to undergo a hysterectomy. In a qualitative study by Williams and Clarke (2000), other concerns for African American or Black women were the belief that their spouses or significant others may abandon or reject a woman who has had a hysterectomy.

Zhang et al. (2015), found similar results in their study titled "Heterosexual Rejection and Mate Choice: A Sociometer Perspective." The study confirms previous studies on social behaviors on mate selection and rejection, thereby confirming that ST opens up a new perspective for studying mating and its underlying practices. Zhang and his team of researchers investigated the process of mating and relationships. Using Chinese undergraduate students, they found that the longing for positive and lasting

social relations is one of the most pervasive, cardinal, and fundamental human needs. According to Zhang et al. (2015), rejection portrays negative self-referential cognitions concerning the rejected individual resulting in a lower social worth, self-esteem, or satisfaction with increasing frustrations. Despite the clinical needs and tense health conditions that require the removal of the uterus, it takes African American women a long time to consider having a hysterectomy because of the fear of rejection, abandonment, and stigmatization (Augustus, 2002; Askew & Zam, 2013; Cabness,2010; Marvan & Castilo-Lopez, 2011; Williams & Clarke, 2000;).

Aydin et al. (2013) utilized the same principle in their study titled "The Effects of the Need to Belong and Being Informed on the Reactions of Ostracism," using an admixture of students Hacettepe University in Turkey. This study also found a link between individual acceptance and rejection from a social group and self-esteem or satisfaction. The study also confirmed that belongingness and relationships are basic human needs. The authors define ostracism as an exclusion from a group. Ostracism thwarts the individual, meaningful existence leading to lower self-esteem, self-satisfaction, and feeling of worthlessness (Aydin et al., 2013). Some African American women who have had hysterectomy feel ostracized or neglected by their African American relational group. Augustus (2002) asserted that some African American people appear to have rigid negative and cultural beliefs about hysterectomy. According to the study, some of these myths may have contributed to African American men's negative feelings and perceptions towards their spouse's decisions to have a hysterectomy. It may have contributed to some African American women reported low self-esteem and

satisfaction (Augustus, 2002). In most studies regarding self-esteem or self-satisfaction, Sociometer theories have been the widely used theoretical framework. ST was chosen because it will help answer the central research questions regarding self-esteem or self-satisfaction and African American men's attitudes that may have caused them to abandon and reject their spouses who have had hysterectomies.

Similar studies conducted by Kavanagh et al. (2014) also confirmed the hypothetical experiences of women's negative feelings when rejected versus accepted by their spouses or significant others. Depending on a partner's decision, the women may experience increased satisfaction, commitment, and high self-esteem towards the established relationships or may feel the opposite. The study also investigated state self-esteem levels that mediate the effects of acceptance and rejection on individual satisfaction and commitment to relationships. The study found that romantic acceptance, instead of rejection, increases self-esteem and improves self-satisfaction in a relationship. Some African American men hold opposing views and may use derogative language on African American women who have had a hysterectomy (Augustus, 2002). The fear of losing a significant other, affection, and loss of the ability to attract a companion after a hysterectomy has been one of the major concerns for some African American women who would like to elect the surgery, irrespective of how arduous their condition may be (Augustus, 2002).

Mahadevan & Sedikides (2019) studied personality processes and individual differences with significant emphasis on self-esteem, narcissism, and exclusions also used ST combined with Hierometer theory. According to the study, ST describes self-

esteem as an inclusion-regulating function, with self-esteem forming part of the psychological system that regulates social inclusion (Leary & Downs, 1965). Inclusion is the opposite of rejection, and the study has shown that social support plays a vital role in African American women's ability to cope with hysterectomy (Cohen, 2011). According to Cabness (2010), the partner's negative stereotypes about hysterectomy can play a predominant role in the women's pre-surgery decision-making. Adequate support and incredibly emotional support toward the African American women planning to elect a hysterectomy can be critical to their personal experiences before and after the surgery (Augustus, 2002).

Literature Review

For most women, the uterus is regarded as a valuable and alchemic organ of the reproductive system (Wagner et al., 2019). In a study by Wanger et al. (2019), the uterus was portrayed as one of the female reproductive system's significant and most important organs. The uterus functions in part as a symbol of female sexuality. It is also an organ of fertility and motherhood. It is sometimes called a natural incubator that helps with the fertilization of eggs during the woman's childbearing period (Ilknur et al., 2016). Some women believe that removing these reproductive organs during a hysterectomy may result in the total collapse of a female's best time of life and may eventually result in series of feelings, including low self-esteem or low self-satisfaction (Yaman et al., 2016). Adolescent African American women believe that the loss of their uterus may lead to a chaotic relationship between the woman and her spouse, which sometimes could result in abandonment, divorce, or rejection (Zarshenas et al., 2021). Studies have also shown that

hysterectomy is the second most performed gynecological procedure in the U.S., with an average of 600,000 hysterectomies performed every year (Dillaway, 2016). Similar studies have also posited that in the United States, African American women have higher hysterectomy rates and are at a young age than other ethnic groups (Dillaway, 2016). Tying both issues together may assume that hysterectomy is a public health issue and a significant problem for women, especially African American women, with the highest incidence rate.

Limited Current Studies on Hysterectomy in African American Women

Some studies in the literature regarding African American women's perceptions and feelings before and after artificial surgical menopause also referred to as hysterectomy, have warned that more studies are needed to bridge the existing gaps in this area. Because of the significant dearth of information regarding African American women's hysterectomy experience and how they are impacted by their spouses and significant others' actions, authors have requested the need for future studies to address these social and public health problems (Elmoneim et al., 2017; Saffarieh et al., 2019). The uterus' removal and sometimes the ovaries (oophorectomy) and other reproductive organs are medically referred to as a hysterectomy. Studies have shown that in the United States, African American women not only have the highest prevalence of hysterectomy, but they also have the highest incidence of the indications associated with hysterectomies, such as uterine fibroids, pelvic inflammatory diseases, and endometriosis (Dillaway, 2016; Robinson et al., 2017). Dillaway (2016) conducted similar research that did not only identify African American women as being 2-3 times more likely than

Caucasians to be clinically diagnosed with uterine fibroids, a major symptom of hysterectomy in addition to being twice more likely to elect hysterectomy at a younger age than any other race in the U.S.

Despite these limitations in the literature, there is a dearth of current studies on African American women and their hysterectomy experiences in the U.S. (Augustus, 2002; Palmer et al., 1999). For example, a tremendous search on MEDLINE and CINAHL databases using the theme: Hysterectomy AND self-esteem OR self-concept OR self-worth among African American or Black women was performed. Only six articles were retrieved dating back between 1999 and 2002. Using both databases, "Self-esteem," a component of self-satisfaction, was searched. Three articles dated between 2000 and 2002 were displayed. An extensive nongeneralized search for hysterectomy emphasized African American women's beliefs, perceptions, and feelings before and after the surgery was entered in the two search engines. Nine articles between the same date period were displayed. When the National Databases for African American men and women's feelings and perceptions and hysterectomies were searched, the result displayed no significant difference from the previous searches. Doing this and other series of searches confirmed previous authors claim that there are not enough data available on hysterectomy among African American women in the U.S. (Palmer et al., 1999; Williams and Clark, 2004). Though very few current studies exist on African American women and their hysterectomies, several recent studies on hysterectomies exist in Turkey.

In general, most studies on hysterectomies among African American women in the U.S. were completed between 1991 and 2004, leaving a wide gap in the literature that may help in understanding the impact of hysterectomy on self-esteem, self-satisfaction, and the African American men's perceptions about the surgery on their spouses or significant others (Augustus, 2002). The extensive gap in literature contributed to my desire to do this study. However, some references in this study may reflect the few existing and previous studies already in the literature.

History of Hysterectomies—Past and Present

Literature has shown that the first abdominal hysterectomy was performed in 1843 in Manchester, England, by Dr. Clay, and since then, hysterectomy has been a second commonly performed procedure (Shimizu et al., 2011). In the U.S., the first hysterectomy was performed in Boston by Dr. Warren in 1843 (Shimizu et al., 2011). As the incidence of hysterectomies continued to increase, some studies have shown that over 550,000 hysterectomies are performed annually (Aerts et al., 2000; Flory et al., 2005). According to Dicker (1982), nearly five million women of reproductive age underwent hysterectomy within the last decade, making the procedure one of the most frequently performed surgery in the United States, a public health concern. Hysterectomy procedures are divided into groups. According to the National Women Health Network (Huang et al., 2020), the four major types are (1) Partial hysterectomy, (2) Total or Complete hysterectomy, (3) Radical hysterectomy, and (4) Bilateral Salpingo-Oophorectomy. It is noteworthy that any chance of becoming pregnant is ruled out despite the type of hysterectomy elected and performed. As a result, African American

women, especially those 30 years and younger, may undergo significant self-esteem or satisfaction issues due to negative spousal feelings and unwelcome attitudes about hysterectomized women.

The Four Types of Hysterectomy Procedures

Partial Hysterectomy

With partial hysterectomy, the uterus' body is removed during the surgery, leaving the cervix in place (Kassem et al., 2019).

Total or Complete Hysterectomy

Total or complete hysterectomy involves the removal of both the entire uterus and the cervix (Schäfer et al., 2017).

Bilateral Salpingo-Oophorectomy Hysterectomy

With this type of surgery, the uterus is removed, and the cervix, ovaries, and fallopian tubes. This type is the most performed hysterectomy in the U.S. (Doğanay et al., 2019).

Radical Hysterectomy

This type of hysterectomy requires removing not only the uterus and cervix: it allows for the removal of the ovaries, fallopian tubes, and sometimes the upper portion of the vagina and lymph glands (Huang, 2020).

Surgical Options for Hysterectomies

One of the powerful instruments utilized by women in general for measuring satisfaction with the outcome of a hysterectomy is the surgical modality used during the procedure. A surgical modality is methodological approach physicians use in performing

a hysterectomy; each modality has its advantages and disadvantages (Wu et al., 2019). However, because of African American women's experience and perceptions during and after a hysterectomy, such as diminished support and sometimes rejections from their spouses, satisfaction may be more complicated than just the modality used. After a hysterectomy, African American women's satisfaction may be associated and measured by their married relationship and attitudes. African American women's hysterectomy experiences, such as the level of acceptance from their spouses and significant others, may become a priority and vital to their happiness, self-esteem, and self-satisfaction after the surgery (Augustus, 2002). That notwithstanding, the study also showed that modality also played a major role in African American women's satisfaction after a hysterectomy (EidFarrag et al., 2018). In as much as most women preferred the Robotic approach to hysterectomy, it is an expensive approach when compared the traditional approach, since some women, especially Black or African American women, cannot afford the procedure (Pitter et al., 2014).

According to Pitter et al. (2014), some of the modalities available include but are not limited to: (a) abdominal hysterectomy; (b) vaginal hysterectomy; (c) laparoscopic-assisted of abdominal or laparoscopic-assisted of vaginal hysterectomy; and (d) the robotic-assisted hysterectomy. With the latest technological innovations, while some modalities are widely used, others are sparingly used . The abdominal and vaginal hysterectomy approaches have significantly declined since 2001 (Pitter et al., 2014). The study shows that the robotic surgical hysterectomy approach is an independent predictor of better patient experience and overall satisfaction after surgery. While the use of the

robotic and laparoscopic approaches has increased tremendously, the abdominal and vaginal process has decreased significantly over the years (Pitter et al., 2014).

Abdominal Hysterectomy

The abdominal hysterectomy is the standard and most common approach for hysterectomy in terms of cost-effectiveness. However, unlike the minimally invasive procedure, such as the laparoscopic and robotic hysterectomy methodologies, the abdominal approach results in a longer recovery time with lesser satisfaction in general surgical outcomes. According to Pitter et al. (2014), quicker return to normal activities after a hysterectomy may be associated with an overall willingness to choose a given surgical modality and assist in recommending an approach to other clients. Studies have also posited that most patients prefer the minimally invasive methodology over the Abdominal approach, which may have contributed to why the Abdominal hysterectomy method has clinically declined substantially over the years (Pitter et al., 2014). Price et al. (2017) contended the previous study and asserted that minimally invasive hysterectomy had a more significant advantage over abdominal hysterectomy. The advantages include improved postoperative pain management, fewer complications, and lower hospital expenditures due to shorter hospital stay after surgery.

Vaginal Hysterectomy

The vaginal approach involves the removal of the uterus through the vagina (Mohammed et al., 2017). In a prospective randomized study by Mohammed et al. (2017), vaginal hysterectomy has multiple benefits than some alternatives, such as the abdominal approach. The advantages include but are not limited to lesser scarring

complications, more secondary morbidity and mortality rates, and shorter hospital stay after surgery (Mohammed et al., 2017). Since most of the hysterectomy symptoms and indications including uterine fibroids are common with African American women, African American women tend to have higher hysterectomies rates than Whites (Pollack et al., 2020). Kadhel et al. (2020) reiterated, African American women not only have higher rates of fibroid, but their fibroids are more pronounced compared to other races within the United States. For instance, African American women tend to have numerous fibroids compared to Caucasian women, resulting in the use of unique modalities such as the vaginal approach instead of the Minimal Invasive approach that requires a minimal cut under the belly button area (Mohammad et al., 2017). In the same study, Mohammad et al. (2017) posited that many surgeons preferred the vaginal hysterectomy approach over other methods when facing a large uterus removal due to uterine fibroids, as in most African American women. The vaginal hysterectomy modality is also one of the most cost-effective approaches (Mohammad et al., 2017).

Laparoscopic Hysterectomy

With laparoscopic hysterectomies, the surgeon may use video cameras that permit greater visibility. Lee et al. (2018), noted in a study that the laparoscopic hysterectomy approach was more expensive than the vaginal approach and might be limited in use than vaginal hysterectomy. However, according to Lee et al. (2018), limited use of the laparoscopic modality has changed but not drastically within the last decade. Study shows that African American or Black women compared with Caucasian women were financially deprived and less likely to use the laparoscopic approach (Lee et al., 2018). In

the same study, Lee et al. (2018) posited that the laparoscopic-assisted hysterectomy seems to have a higher rate of preoperative medical comorbidities and other significant risk factors, primarily when the surgery was aimed to remove numerous and large fibroids diagnosed in a majority of African American women.

Robotic Hysterectomy

Robotic hysterectomy is becoming one of the best methods for hysterectomy in recent years. However, its affordability is limited to high-income groups and popular insurance companies instead of laparoscopic hysterectomy (Price et al., 2017). Robotic-assisted hysterectomy is a minimally invasive surgical methodology that requires three to four incisions around the belly button. In a study conducted by Price et al. (2017), the authors posited that minimally invasive hysterectomy is superior to other methods. However, its use is diminished by some ethnic groups or social classes due to the extensive cost. It is also not a preferred payment option by the government Medicaid Insurance Programs. Price et al. (2017) asserted that racial and socioeconomic disparities were some of the reasons accesses to robotic-assisted hysterectomy might not be the primary suggested hysterectomy approach for people in the low-income group. However, Price et al. also noted that future modification was required to ensure equal access to robotic surgical hysterectomy to everyone, such as the African American women, since it was becoming a highly preferred approach by most patients. Pitter et al. (2014) found similar assumptions and noted in their study that the robotic surgical modality had been the only approach with a high predictor for better patient experience and overall satisfaction. Price et al. (2017) also noted that of the 54% Caucasians that had had a

minimum invasive hysterectomy, more than half of them were performed using the robotic approach, while of the 48% African American women that had the same surgery, only 25% were completed using the robotic-assisted modality.

Self-Esteem and Satisfaction After a Hysterectomy

Self-Esteem After a Hysterectomy

Despite the myths, beliefs, and perceptions culturally placed on hysterectomy, African American women still have the highest rate of hysterectomy (Dillaway, 2016). The uterus is considered a mark of femininity and the reproductive system (Ilknur et al., 2016). As a mark of a woman's identity related to her social role's performance, the uterus reaffirms its presence in a woman every month through the menstrual cycle. Some African American women that have elected to have a hysterectomy and remove the uterus may end up feeling less of a woman, become depressed, and have self-esteem issues (Dillaway, 2016). Dillaway (2016) noted that while the average age for a hysterectomy on African American women was 39 years, the average age for hysterectomy among white women was 46 years. Electing a hysterectomy at a younger age, as in African American women, can result in a series of negative feelings, including low self-esteem and lack of satisfaction from the surgery outcome. According to Cohen et al. (2011), women who underwent hysterectomy before age 40 may experience significant psychological issues such as depression and lowered self-esteem or self-satisfaction. Using qualitative ethnographic study, Augustus (2002) asserted due to African American men's castigations towards African American women who had had a hysterectomy, African American women could experience severe emotional problems.

Jones and Govan (2020) conducted a study on a star musician who accidentally fell from the stairs of her home and was forced to have a hysterectomy. Jones and Govan reported that the singer was highly disturbed, especially when told that she could no longer bear a child. Jones and Govan indicated hysterectomy had left severe damage to her self-esteem, satisfaction, and sexuality. African American women report excessive negative feelings, perceptions, and derogatory remarks from their spouses after a hysterectomy. The emotional abuse in Black women who had elected a hysterectomy may have experienced depressive moments, physical drainage, and low self-esteem. Studies by Askew (2013) and Cohen et al. (2011) also confirmed this by noting that spousal rejections and loss of an active reproductive organ by African American women due to hysterectomy might sometimes result in a state of low self-esteem and self-satisfaction after a surgery.

Self-Satisfaction After a Hysterectomy

Trends in overall patient satisfaction after a hysterectomy depend not only on the modality used during the surgical procedure but also on other factors. Pitter et al. (2014) hypothesized that multiple impacts of sociodemographic characteristics, the length of stay at the hospital after surgery, and reported recovery time could also play a predominant role in the outcome of patient's satisfaction after a hysterectomy. Satisfaction may depend on race because how an African American woman may feel about a hysterectomy may differ from how her Caucasian counterpart may feel about the same surgery. Dillaway (2016) asserted that though social science scholars had done a significant amount of work on women's natural menopause

experiences, they had not done enough studies on women who had artificial menopause or hysterectomy artificially. The study concluded that there had been little or no analysis of the effects of race and ethnicity in contemporary cohorts of African American women with hysterectomy. Even with the same race, the way younger or pre-menopausal women feel about a hysterectomy outcome may differ from how post-menopausal women feel about the surgery (Dillaway, 2016). Weiss et al. (2009) noted a clear racial difference in hysterectomy. Weiss et al. (2009) posited that African American women were twice likely to have a hysterectomy at a younger age than Caucasian women.

Because hysterectomy requires removing the uterus, disabling women's ability to have children, adolescent African American women may be more dissatisfied with the surgery outcome than older African American women (Dillaway, 2016). One of the aspects responsible for a woman's satisfaction in life is her body's functionality, including her sexual functionality and other feminine biological representation, such as her uterus and childbearing abilities (Nemati & Weitkamp, 2020). Since hysterectomy removes the uterus and other physical reproductive organs, it can create significant misunderstandings and angry moments in a relationship. The procedure may also lead to substantial low self-esteem or satisfaction in African American women who have had a hysterectomy. Some African American women may postpone their hysterectomy longer than expected to decide whether to undergo surgery irrespective of how significant their health condition may be (Augustus, 2002). These conditions may contribute to how satisfied African American or Black women may feel before and after a hysterectomy.

Indications of Hysterectomy

It is still unknown why Black or African American women have the highest prevalence and incidences of U.F. in the United States compared to other racial groups. However, studies have shown a positive correlation between U.F. and hysterectomy among Black or African American women (Luo et al., 2017). A study conducted by Stewart et al. (2013) indicated that Uterine Fibroids disproportionately impact Black or African American women. A study by Dillaway (2016) confirms that Black or African American women have been documented to have the highest incidence of U.F. in the United States. Studies have shown that Black women are known to have the highest rate of uterine fibroids. They are also known to have been diagnosed with dysfunctional uterine bleeding and other gynecological conditions treated with hysterectomy (Yu et al., 2018). As a result, fibroids are the primary indication for hysterectomy among Black or African American women (Callegari et al., 2019).

Beliefs, Myths, and Perception of African American People Toward Hysterectomy

Some Black or African American people have strong negative and cultural beliefs about hysterectomy (Augustus, 2002). A major study by Augustus (2002) posited that the Black community, especially African American men, has substantial negative and cultural beliefs about hysterectomies. Researchers have noted that African American men may abort a relationship if they notice that their spouse or significant others have elected a hysterectomy (Elmoneim et al., 2017). Black or African American women who have had hysterectomies may face unwelcome negative stigmas and irrational spousal decisions that may include but are not limited to rejections, fear, and sometimes

abandonment (Elmoneim et al., 2017). More than any other race, African American women believe that their spouse and significant others can abandon them if they realize that they have had a hysterectomy (Augustus, 2002; Elmoneim et al., 2017). These fears and negative beliefs can significantly impact African American women's decision to elect the surgery or result in a major delay despite the possibility of health risks (Augustus, 2002; Elmoneim et al., 2017).

African American Women's Hysterectomy Decision Making

Before electing a hysterectomy, women undergo a series of decision-making processes to prepare themselves for an irreversible lifetime surgical experience. Removal of the uterus and sometimes the ovaries and fallopian tubes can be very devastating, especially on African American women diagnosed with a hysterectomy during their childbearing age. The women's future is dependent on their decision. While some African American women's decisions may be based on the surgery's cost-benefit analysis, others may be based on a preferential modality that can fit their circumstances and affordability. However, one immediate and most complex decision that some African American women face before electing a hysterectomy is aligning their surgical needs with their spousal requests and maintaining a successful relationship (Elmoneim et al., 2017; Price et al., 2017). A study by Shimizu et al. (2011) showed that the decision-making process leading to hysterectomy could be complicated, in some cases involving years of hormonal treatments and recommendations from the healthcare institution.

According to Shimizu (2011), other variables may be compounded into the African American women's decision-making process, adding more depths and

complexity. Some of these variables may include but are not limited to: (1) whether the symptoms associated with the indication warrant a hysterectomy; (2) if there can be other or better alternatives than hysterectomy; (3) what might be the best surgical modality and whether it is affordable; (4) if the spouse is unaware of the intent to elect a hysterectomy; (5) how the news about hysterectomy can be broken down to the spouse and significant others to avoid possible conflicts; and (6) if there are any morbidity or mortality concerns. Though the rate of current successes in hysterectomies is high, between 85 - 90%, a study by Shimizu et al. (2011) reported that research in Glasgow, Scotland had shown a 3% – 14% possibility of mortality and morbidity cases, making it a concern for women when planning for a hysterectomy.

Male partner's roles and support are essential when women make decisions to elect a hysterectomy. According to Keshavarz (2002), 20 million United States women are estimated to have had a hysterectomy, and as major surgery, may have some negative impacts on their partners. Additionally, studies have shown that in some cases, African American men are excluded from all discussions and decisions relating to hysterectomy because of the lack of understanding and negative perceptions about the surgery (Prather et al., 2018).

Some African American men's negative stereotypes regarding surgical menopause can emerge as significant factors in women's pre-surgery decision-making (Prather et al., 2018; Winget et al., 2020). In a qualitative study by Augustus (2002), African American women posited that no matter how dreadful their symptoms and health problems may be, it is not uncommon for African American women to avoid telling their partners that they

plan to have a hysterectomy. As a result, some African American women may exclude their spouses from the decision-making process. The emotional burden on some African American women from hiding and keeping hysterectomy a secret from their spouses may cause them to develop low self-esteem and satisfaction before and after a hysterectomy (Augustus, 2002).

Hysterectomy Among Younger Women of Childbearing Age

Age differences among African American women who have had a hysterectomy may depict different surgery feelings and perceptions. The age at hysterectomy may contribute to the person's feelings about self-esteem and self-satisfaction. While younger Black or African American women in their childbearing age may seem dissatisfied about hysterectomies and end up with lower self-esteem and satisfaction, older African American women may feel differently (Prather et al., 2018; Richter et al., 2000). Results from a study by Dillaway (2016) confirmed the notion that women who were older at the time of hysterectomy seemed more accepting of the surgery than younger African American women. The older women feel more in control and have lesser worries, better decision-making, and positive attitudes towards hysterectomy. Richter et al. (2000) conducted a sizeable bi-ethnic study among African American and Caucasian women 30 and 65 with a hysterectomy. They found that some African American men may hold grudges towards their spouses who have had a hysterectomy because the women may not have a chance of becoming future mothers (Richter et al., 2000). According to the study by Richter et al. (2000), some men see African American women who had had hysterectomies as a reason they cannot plant their seeds. African American women have

reported that some spouses may utter derogatory words and use unwelcome comments because they elected a hysterectomy (Richter et al., 2000).

In a study by Marvan and Castillo-Lopez (2011), 33% of the women with hysterectomies posited that their life had changed in a negative direction partly because they could no longer have children for their spouses. Some Black or African American women believe that their lives have changed since the loss of their uterus (Marvan & Castillo-Lopez, 2011). Marvan and Castillo-Lopez (2011), younger women 35 and 55 years compared to older women expressed intense dissatisfaction with their quality of life. The results of the study indicated that higher depressions and the possibility of low self-esteem or satisfaction. While these studies have shown that African American women seem to be more dissatisfied with the outcome of hysterectomy, some studies have demonstrated higher and positive feelings by some women after a hysterectomy (Pitter et al., 2014). In their study, Lewis et al. (2000) established that the outcomes of hysterectomies could be met with mixed feelings as most women and possibly men might appear to derive some benefits from the surgery. For example, Richter et al. (2000) furthered a discussion after interviewing a host of women who had had a hysterectomy and elicited that on a positive note, men could be more relaxed and feel freer from worrying about contraception knowing that women who had had a hysterectomy could no longer have children. Hysterectomy may be beneficial to some people depending on their plans in life or their ages.

Socioeconomic Status

Studies also show that socioeconomic and sociocultural factors such as education and marital statuses may play major roles in women's hysterectomy decision-making (Gartner et al., 2018; Price et al., 2017; Sanei-Moghaddam et al., 2018). Marvan and Castilo-Lopez (2011) conducted a study in Canada on women from diversified ethnic groups who have had a hysterectomy. The purpose of Marvan and Castilo-Lopez (2011) was to examine Black women's fears and misconceptions about hysterectomies. Marvan and Castilo-Lopez found that women of lower socioeconomic class with limited or no education perceived hysterectomy as a threat to their womanhood. The result is lower self-esteem and self-satisfaction than women with higher education. Women with a lower education level have more misconceptions, fears, and negative responses to hysterectomy than women with higher education (Gartner et al., 2018). The level of education also plays a major part in men's decision-making and attitude towards hysterectomy. African American women perceive African American male partners' views as unfavorable and non-supportive (Marvan & Castilo-Lopez, 2011). Bower et al. (2009) postulated a hypothesis that individuals with lower socioeconomic statuses might be less knowledgeable about hysterectomy and other available treatment options.

Social Implications of the Study

Studies show that over 600,000 hysterectomies are performed every year in the United States (Alerts et al., 2020; Dillaway, 2016; Ezzat, 2019). Hysterectomy is not only an American public health concern; it is also a significant problem in other parts of the world. For example, a study by Martins et al. (2013) noted that in 2011, 103,510

hysterectomies were performed in Brazil. Between 2008 and 2009, nearly 47,000 hysterectomies were done in Canada, making hysterectomy the second most frequently performed surgical procedure on Canadian women (Stankiewicz, Pogany & Popaduik, 2014).

In the U.S., as noted earlier, studies show that African American women have the highest rate of hysterectomy and are younger at the time of diagnosis and surgery compared to White women (Robinson et al., 2017; Temkin et al., 2018). However, Weber et al. (1999) noted little or no data on African American women's hysterectomy experience. It is believed that hysterectomy impacts African American women's self-esteem, self-satisfaction, and social and psychological well-being. Most previous studies recommended that more research be conducted in this area to promote the real feeling and perceptions of African American women and their spouses before and after a hysterectomy (Askew & Zam, 2013; Augustus, 2002; Bower et al., 2009; Cohen et al., 2011; Hess et al., 2012; Weber et al., 1999). New studies, such as this proposed study, could not only help address the public health concerns regarding hysterectomy; it could also assist program planners, service providers, and hospitals in designing appropriate treatment options that could help unify African American families and reduce fears of rejection or abandonment. This study could help fill some of the needed gaps about African American men's and women's perceptions and negative feelings such as low self-esteem, post-satisfaction outcomes, and possible rejections due to hysterectomy. The study could also help empower African American women to weigh their benefits, risks, and alternate choices before electing a hysterectomy. As a result, this study could add

social knowledgebase on all future hysterectomy applications and increase spousal understanding, therefore creating remediation between African American women and their spouses. Other benefits may include extending social work and extensive knowledge about ethnic views and hysterectomy perceptions.

Summary of the Chapter

Studies have shown that of the over 600,000 hysterectomies that are performed in the U.S. every year, African American women of reproductive and childbearing ages not only have the highest indication of hysterectomy and symptoms but have the highest rate of hysterectomy than any other ethnic group (Alerts et al., 2020; Dean et al., 2016; Dillaway, 2016; Ezzat, 2019; Robinson et al., 2017). Series of studies also show that African American women have hysterectomies at a younger age, and according to some studies, these may result in marital conflicts leading to possible low self-esteem, lack of self-satisfaction, and rejection from the African American males (Dillaway, 2016; Prather et al., 2018). According to Augustus (2002), African American women have negative connotations of hysterectomy despite their health conditions, sometimes delaying the procedure until their conditions worsen. The impact of damaging myths and perceptions among some African American people, especially the African American men, about hysterectomy may negatively affect African American women's decision to elect a hysterectomy, thereby worsening their complications and health conditions.

Although African American or Black women are shown to have a worse history of hysterectomy, there is a shortage of current literature about the outcomes of hysterectomies and how they feel before and after the surgery. Moorman, Schildkraut,

Myers, and Wang (2011) reported that although African American or Black women were more likely than their Caucasian counterparts to undergo the process of hysterectomy, few data existed that described their feelings or perceptions before and after the surgery. Most studies suggest more research in this area to help understand how African American women with the highest prevalence of hysterectomies feel before and after the surgery as well as their partners' perceptions about hysterectomy (Askew & Zam, 2013; Robinson et al., 2017; Williams & Clark, 2000).

Chapter 3 discusses the study's design, methodology, and rationales that led to the design choice. The chosen method will help describe how the impact of hysterectomy on African American men may lead to possible rejection or termination of relationships with African American women. The study will also review how African American men's decisions may impact African American women's self-esteem and self-satisfaction. Using a quantitative design, the study will also investigate how economic statuses such as income and education may play a predominant role in African American women's decision-making before and after a hysterectomy. Furthermore, the sampling procedure, instrumentations, study validity, and ethical procedures will also be discussed in chapter 3.

Chapter 3: Research Method

Introduction

The purpose of this quantitative study was to explore whether the election of hysterectomy by African American or Black women aged between 30 and 65 years is associated with (a) self-satisfaction, a component of self-esteem; (b) the partner's perceptions and attitudes about hysterectomy; and (c) African American women's socioeconomic statuses. The chapter also explores the attitudes of African American women's spouses when discovering that their wives or significant others had a hysterectomy. Studies have shown that African American men may have negative beliefs and stereotypes about hysterectomy; some African American men may abandon a relationship or reject a spouse or significant other because they have had their uterus removed by hysterectomy (Askew & Zam, 2013; Cabness, 2010).

This chapter's primary focus is describing the process of determining an appropriate design type and the rationale or reason why the design was selected. A quantitative design structure was my choice for this study because of its numerous advantages. The quantitative design strategy was chosen in this study because of its measurable characteristics on numerical relationships, such as the association between hysterectomy and self-satisfaction among African American women, using survey data (Asal et al., 2017). Using a quantitative strategy makes gathered data more reliable and less open to arguments.

I also use this chapter to discuss other pertinent aspects of the study methodology, such as the target population, sampling protocols and procedures, and the data collection

methodology. Additionally, I explore and discuss the two survey instruments used to analyze and collect data from Survey Monkey, along with their advantages and disadvantages. Information that relates to the confidentiality and use of human subjects for research purposes is also addressed in this chapter. The chapter incorporates discussion about significant data characteristics such as data eligibility, measurements, threats to validity, data collection, processing, and utilization. Other aspects of the study, such as survey data reliability and dependent, independent, and covariables that played a predominant role, are presented, and addressed accordingly.

Research Design and Rationale

This study used a quantitative exploratory nonexperimental research design. One of the reasons for selecting this design was that it allows a researcher to compare dependent and independent variables. A quantitative design helped this study obtain a detailed comparison of African American women's experiences before and after a hysterectomy. The purpose of this quantitative study was to explore whether the election of hysterectomy of African American or Black women aged between 30 and 65 years is associated with (a) self-satisfaction, a component of self-esteem; (b) the partner's perceptions and attitudes about hysterectomy; and (c) African American women's socioeconomic status. Further, the study was used to determine whether there is an association between African American women's positive feelings toward "self" after electing a hysterectomy and socioeconomic status markers such as occupation, income, and education.

This exploratory nonexperimental quantitative design used two survey instruments: the RSES and Marvan's BATH questionnaire. The survey was based on a proposed cross-sectional study design using a one-way analysis of covariance (ANCOVA) methodology. Data were retrieved electronically from Survey Monkey Target Audiences. The choice of ANCOVA was driven by its capability to reduce variance errors within groups, allowing covariance to explain why the errors occurred (Field, 2015). According to Shieh (2017), ANCOVA design is commonly used to reduce error variances. It is also used to improve the power of analysis by adjusting covariate effects on both dependent and independent variables. The cross-sectional survey design using Survey Monkey was the opposite decision because it allowed me to set criteria and disqualify unqualified participants using screen questions as a filter. It could also be used to separate the group of participants who had hysterectomies from those who never had a hysterectomy. The fundamental requirements for this study were being diagnosed and electing a hysterectomy and being African American or Black women. The study consisted of a dependent variable (hysterectomy—IV) and three scaled independent variables as follows: (a) self-satisfaction; (b) the partner's perceptions and attitudes about hysterectomy; and (c) the African American woman's socioeconomic status. The accompanying five covariables were (a) educational attainment, (b) marital status, (c) work status, (d) income, and (e) occupation status. The covariables or predictors were used to determine the relationships between the dependent and independent variables and their effect on treatment outcomes.

Time and Resource Constraints

Using Survey Monkey's cross-sectional survey requires collecting data from participants in a given Target Audience Collector database. If a survey is performed in the United States, the Target Audience Collector will constitute women registered with the Survey Monkey Data Collection Agency to participate and provide research data. According to Survey Monkey, payment for participants' services may be sent directly to the individuals or to their respective optional charities. Participants' data support and contribution criteria may be based on their profile, such as their experience in the targeted subject matter. As a result, some level of monetary and time constraints may be anticipated. Because each project differs based on the country of data collection, the required number of responses, the number of survey questions, targeting needs, and the time it may take to get a required sample size may play a significant role in the amount to be paid for the data. Financial expenditure is one of the significant constraints to be expected. Other possible constraints are (a) the amount of time it may take to get a qualified participant based on the questionnaire's screening questions and (2) the difficulty of setting Survey Monkey's qualification rates. The qualification rate uses certain variables to calculate the percentage of people expected to pass the screening questions before they qualify to take the survey. For example, the number of survey questions, layers in the survey, and other characteristics may be used for price calculations that could substantially increase the final purchase price and the time to end the survey. Any error in the researcher's calculations may result in retrieving either too

many or too few participants for the sample, which may subsequently increase the survey's time and price.

Methodology

Population

The target population for this study was African American or Black women 30-65 years of age who had a hysterectomy and had enrolled as Target Audience Collectors with Survey Monkey. The choice to use Survey Monkey as a data collection source site was made because this reputable organization is known to have a profound ability to collect samples in record times. Another reason was that data retrieval costs were considerably lower than other data-retrieving agencies in the market. Survey Monkey websites allow researchers to purchase survey responses from experienced target audiences within a short time. Survey Monkey is a reputable and reliable survey agent that has served many entities, including students and various researchers from all walks of life and all over the world (SurveyMonkey, 2020). Other reasons why Survey Monkey was chosen were as follows:

1. Survey Monkey provides access to experienced survey contributors worldwide.
2. Survey Monkey has first-class policies that protect participants' or contributors' confidentiality and personal information.
3. Survey Monkey has worked with varieties of Institutional Review Boards (IRBs). IRB members are aware of the policies and quality of protection that Survey Monkey provides regarding the use of human subjects for research and

> survey data. Studies have shown that not only is hysterectomy the most common surgical procedure in the United States, but African American women have the highest rate of hysterectomy relative to any other race (Robinson et al., 2017; Schwartz, 2019).

A recent study by Glass et al. (2017), revealed that in the United States, the prevalence of hysterectomy is higher in the South than it is in the North. As a result of this inadequate distribution, there could be a significant problem with trying to get a representative sample from the northern or southern sections of the United States. Such samples might have the propensity of being biased. The right sample size would adequately represent and address the population statistics.

Survey Monkey is one of the best data collection agencies because it allows the researcher to sample qualified participants from the entire United States or choose a specific region of interest. Getting representative sample data from the population permits a researcher to obtain a normal distribution statistically, resulting in adequate results for a study.

Sampling and Sampling Procedures

As stated earlier, the proposed sampling strategy for this study was to survey African American women 30–65 years of age who had been diagnosed and treated for hysterectomy and were currently registered to take an electronic survey from the Survey Monkey website. Determining sample size for a study is essential, especially when the proposed sample source is Survey Monkey. As noted earlier, Survey Monkey uses sample sizes to estimate the cost of service and data purchases. Although some easy-to-

use formulas are available on the internet for sample size calculation, G*Power calculator, version 3.1.9.4, was used to determine the appropriate priori minimal sample size required for this nonexperimental quantitative study. The study's sample size was calculated using the *F*-tests family in G*Power, and the ANCOVA fixed main and interaction test procedure. The following parameters were imputed, and the result yielded 128 as the sample size. In other words, 128 was the minimum participant sample size required to calculate the basal power needed to answer the three research questions and accept or reject the null hypothesis. The parameters were as follows: (a) effect size set to 0.25 medium, (b) alpha value set to 0.05, and (c) Power set to 0.80. Additionally, while the numerator per degree of freedom (*df*) was set to 1, the group value was maintained at 2. Finally, the number of covariates was changed to three. Output parameters show that at 80% power, the denominator degree of freedom (*df*) and critical factor were 123 and 3.918, respectively, which was more than the power needed to calculate and run power analysis for this study.

Procedures for Recruitment, Participation, and Data Collection (Primary Data)

The target population for this study was African American or Black women 30–65 years of age. After approval from the IRB to collect data, the plan was to upload the RSES and BATH questionnaires to the Survey Monkey website. According to the Survey Monkey website, the number of needed respondents depends on the survey goals and how confident one wants the results to be. However, the number of respondents can be made more accessible by purchasing guaranteed respondents from Survey Monkey Audience. Survey Monkey websites allow researchers to buy survey responses from

experienced target audiences. The researcher must abide by strict rules and regulations from Survey Monkey to purchase data from its audience. Survey Monkey has an informed consent letter built into its website that must be acknowledged before any participant can fill out a survey. Depending on the Survey Monkey website permission and requirements, a researcher can add additional informed consent to the one that Survey Monkey has in place. After paying for a guaranteed number of audiences, my responsibility was to continue monitoring the website by logging in with an assigned username and password. Once the targeted audience was reached, the survey was stopped. Data were checked for authenticity and reliability using Microsoft Excel before being entered into SPSS to check for missing data and further analysis.

Inclusion and Exclusion Criteria

Inclusion criteria encompassed African American women with the required diagnosis and surgical removal of the uterus, also known as hysterectomy. Black women of African descent living in the United States who had a hysterectomy were also included for participation. To participate, women also needed to be 30 to 65 years of age and able to read, write, and understand the English language. Participants needed to be able to understand and give informed consent. Moreover, participants were required to have knowledge and know how to use the internet and respond in English. Exclusion criteria applied to women whose racial identity was different from the African American or Black race. Also excluded were African American or Black women under the age of 30 years and above the age of 65 years.

Instrumentation and Operationalization of Constructs

The current nonexperimental quantitative study used instruments designed by the late Dr. Rosenberg and Ma. Luisa Marvan and Rosa Castillo-Lopez. These two anodyne instruments were used to answer the three research questions of the study. The RSES was used to answer Research Question 1 dealing with self-satisfaction, a dimension of self-esteem, and Research Question 3 about African American women's positive attitude toward self. According to Diener et al. (2012), satisfaction with life and self-esteem are best predicted by positive feelings and the absence of negative emotions.

The BATH questionnaire by Marvan and Castillo-Lopez was used to answer Research Question 3 about feelings of partner rejection toward African American or Black women who have had a hysterectomy. Written permission to use the RSES was obtained from the University of Maryland's Sociology department, where Rosenberg was a professor and mandated to cite the work appropriately. Nova Science Publishers issued written permission to use the BATH questionnaire. As is customary, Marvan and Castillo-Lopez's work will be cited adequately. The two letters of approval to use the questionnaires are attached in Appendices A and B.

Rosenberg Self-Esteem Scale

The RSES (Rosenberg, 1965) is a 10-item scale that measures global self-worth. The RSES uses 10 factorial items to measure both positive and negative feelings about self. The 10 items are (a) self-satisfaction, (b) feeling of no good, (c) feeling of having good qualities, (d) doing things as well as most other people do, (e) feeling of not having

much to be proud of, (f) feeling of uselessness, (g) feeling of worthiness, (h) respect, (i) failure, and (j) having a positive attitude.

In this study, the RSES was used to measure the association between hysterectomy and self-esteem among African American women who had the surgery. The RSES is a widely used self-worth instrument that evaluates individual self-esteem (Gray-Little et al., 1997).According to Cast and Burke (2002), self-esteem is one of the most commonly researched social and psychological science subjects given its ability and use in measuring motivation based on personal feelings. Although there has been some controversy about the RSES, it has been used by multiple researchers with participants from diverse populations and age groups. It has remained one of the most widely used tools for measuring self-esteem, especially in the African American community (Donnellan et al., 2013).

Chao et al. (2017) reported that self-esteem among African American people is a crucial factor reflecting their heritage, culture, and mental health. According to Chao et al. (2017), high self-esteem is a state of successful performance of a mental function that is culturally influenced and can result in productive activities. Rosenberg's (1965) self-esteem scale, commonly known as the RSES, measures global self-esteem values of the "self" using a single-dimensional parameter. This study examined the perceptions and self-esteem of African American women who had a hysterectomy based on African American people's culture and beliefs, specifically in relation to hysterectomies. The RSES has been supported by other studies and is considered a good fit for African American people's self-esteem concepts (Chao et al., 2017). The RSES uses five negative

and five positive items to assess and evaluate individual self-likeness. The scale uses multiple questionnaires to determine individual self-worth and self-esteem based on a given criterion (Chao et al., 2017).

Marvan's Beliefs and Attitudes Toward Hysterectomy Questionnaire

Ma. Luisa Marvan and Vanessa Quiros developed one of the most reliable and valid questionnaires to measure hysterectomy's influence on women's quality of life. The Beliefs and Attitudes Toward Hysterectomy questionnaire is commonly referred to as the BATH questionnaire. BATH is a 25-Item instrument that utilizes a 5-point Likert scale questionnaire and range between strongly agree and strongly disagree principles as in the case of the RSES (Marvan & Lama, 2009). The scale was initially used on Mexican women to measure how the women feel before and after a hysterectomy and how their men counterparts, significant others, and spouses feel about hysterectomy. BATH questionnaire was developed following Ma. Luisa's previous work on "Attitudes towards Menstrual Suppression Scale and from previous studies around the globe on hysterectomy (Marvan & Lama, 2009). The questionnaire is primarily focused on three groups of people (1) women with no hysterectomy, otherwise known as a reference group, (2) women with a hysterectomy, and (3) men's feelings and perceptions about hysterectomy (Marvan & Lama, 2009).

BATH is one of the most reliable instruments on women who have had a hysterectomy, their spouses, and their beliefs and perceptions towards a hysterectomy. According to Marvan et al. (2009), the questionnaire reliability was 82% using Cronbach's alpha coefficient test as a guide and statistical tau-equivalent reliability test

that measures reliability and internal consistency (Cronbach, 1951). Other principles applied to prove item validity are: (a) the Lawshe formula, (b) the extreme group method of comparisons, and (c) the principal component analysis using varimax rotation. The Lawshe (1975) formula is a mathematically oriented test that measures content validity ratios (CVR), which has been used in several studies such as the Multi-dimensional Model of Acceptance of Mobile Banking and Cancer Profile in Jakarta Province (Lotfizadeh & Ghorbani, 2015; Scally & Ayre, 2014). The Extreme Group method is widely used to test the discriminating power of a test item in the case of a questionnaire that compares the number of people with high test scores and answer each item correctly with the number of candidates with low scores and answers them correctly. On the other hand, Varimax Rotation is a statistical analysis used to simplify the expression of a given subspace item with the actual coordinate system unchanged (Kaiser, 1992).

The Beliefs and Attitude Towards Hysterectomy Questionnaire (BATH) objective was to use female devaluation and unique negative feelings such as being incomplete in characterizing self-esteem, self-satisfaction, and partner's reaction towards hysterectomy (Marvan et a., 2009).

Data Analysis Plan

The study's proposed analysis plan will include collecting samples of African American or Black women 30 to 65 years of age from Survey Monkey that is already coded unidentifiable. The data will be exported to an excel spreadsheet to exclude inadequate data before being analyzed using the IBM Statistical Package for Social Sciences (SPSS). During this process, the data will be scrubbed to ensure that no personal

information such as the age or name of a participant and other characteristics can be traced back to that participant. Furthermore, the data will be tested and verified for data accuracy and in alignment with SPSS. After the data has been proven adequate for analysis, the data will be typed in or exported to SPSS.

The current plan is to use the current version of the IBM Statistical Package for Social Sciences (SPSS) for data analysis. IBM SPSS version 25 is the current and more robust SPSS software used at Walden (IBM SPSS, 2011). Since SPSS has an analytical system that checks for missing data, missing values from the Surveyor survey response inaccuracies, when collected, will be checked using SPSS. ANCOVA statistical method will be used for analysis and to help answer the three research questions about the relationship or association between the dependent (DV) and independent (IV) variables, as well as how the covariates might affect the results at ($p \leq 0.05$). However, before a final analysis is done, the plan is to check and mitigate the two basic ANCOVA assumptions: (1) Homogeneity of Regression Slopes and (2) Independence of Covariates of Treatment Effects.

Table 1

Research Questions, Associated Hypothesis, Study Variables, and Data Analysis

Research questions	Hypotheses	Variables	Data analysis
RQ1. Is there an association between feelings of self-satisfaction and hysterectomy among Black or African American women ages 30–65 years, as measured with the Rosenberg Self-Esteem Scale (RSES), controlling for educational attainment, marital status, and work status?	***Ho*1**: There is no association between feelings of self-satisfaction and hysterectomy among Black or African American women ages 30-65 years, as measured with the RSES, controlling for educational attainment, marital status, and work status. ***Hα*1:** There is an association between feelings of self-satisfaction and hysterectomy among Black or African American women ages 30-65 years, as measured with the RSES, controlling for educational attainment, marital status, and work status.	Independent variable: Hysterectomy (dichotomous grouping) Dependent variable: Feelings of self-satisfaction (scale) Covariances 1. Education attainment 2. Marital status 3. Work status	*F*-test ANCOVA
RQ2. Is there an association between feelings of partner rejection and hysterectomy among Black or African American women ages 30–65 years, as measured with Beliefs and Attitudes Toward Hysterectomy (BATH), controlling for educational attainment, marital status, and work status?	***Ho*2**: There is no association between feelings of partner rejection and hysterectomy among Black or African American women ages 30–65 years, as measured with BATH, controlling for educational attainment, marital status, and work status. ***Hα*2**: There is an association between feelings of partner rejection and hysterectomy among Black or African American women ages 30–65 years, as measured with BATH, controlling for educational attainment, marital status, and work status.	Independent variable: Hysterectomy (dichotomous grouping) Dependent variable: Feelings of partner rejection (scale) Covariances: 1. Education attainment 2. Marital status 3. Work status	*F*-test ANCOVA
RQ3. When controlling for socioeconomic statuses (education, income, and occupation), is there an association between positive attitudes toward "self" and hysterectomy among Black or African American women ages 30–65 years, as measured with the RSES?	***Ho*3**: When controlling for socioeconomic statuses (education, income, and occupation), there is no association between positive attitudes towards "self" and hysterectomy among Black or African American women ages 30–65 years, as measured with the RSES. ***Hα*3**: When controlling for socioeconomic statuses (education, income, and occupation), there is an association between positive attitudes toward "self" and hysterectomy among Black or African American women ages 30–65 years, as measured with the RSES.	Independent variable: Hysterectomy (dichotomous grouping) Dependent variable: Positive attitudes towards "self" (scale) Covariances: 1. Education attainment 2. Income 3. Occupation	*F*-test ANCOVA

Table 2

Data Analysis: Variables, Data Type, and Measurement Levels of Each Research Question and Demographics

RQs	Variables and data type	Order
Research Question 1	Dependent variable Feelings of self-satisfaction (scale)	Nominal
	Independent variable Hysterectomy (dichotomous grouping) (0 = Hysterectomy) (1 = No hysterectomy)	Nominal
	Covariances Education attainment (0 = Diploma, 1 = Associate, 2 = Bachelor, 3 = Master, 4 = Other)	Ordinal
	Marital status (0 = Single, 1 = Married, 3 = Separated, 4 = Divorced)	Ordinal
	Work status (0 = Employed, 1 = Not employed, 2 = Other)	Ordinal
Research Question 2	Dependent variable Feelings of partner rejection (scale)	Nominal
	Independent variable Hysterectomy (dichotomous grouping) (0 = Hysterectomy) (1 = No hysterectomy)	Nominal
	Covariances Education attainment (0 = Diploma, 1 = Associate, 2 = Bachelor, 3 = Master, 4 = Other)	Ordinal
	Marital status (0 = Single, 1 = Married, 3 = Separated, 4 = Divorced)	Ordinal
	Work status (0 = Employed, 1 = Not employed, 2 = Other)	Ordinal
Research Question 3	Dependent variable Positive attitudes toward "self" (scale)	Nominal
	Independent variable: Hysterectomy (dichotomous grouping) (0 = Hysterectomy) (1 = No hysterectomy)	Nominal
	Covariances Education attainment (0 = Diploma, 1 = Associate, 2 = Bachelor, 3 = Master, 4 = Other)	Ordinal
	Income (0 = $60,000, 1 = $60,001-up).	Ordinal
	Work status (0 = Employed, 1 = Not employed, 2 = Other)	Ordinal
Demographics	Age: (Age)	Ordinal
	Gender (0 = Male)	Nominal
	Race (0 = White, 1 = African American or Black, 2 = Hispanic, 3 = Asian/Pacific Islander, 4 = Native American, 5 = Others)	Nominal

Threats to Validity

Threats to validity are crucial aspects of any study that researchers must investigate and pay proper attention to, which could render the entire study worthless if not eschewed or addressed on time. According to Johnson, 1997, and Baldwin, 2018, because so much time is invested during research, it is necessary to produce the most accurate results. Accuracy in a quantitative study will require the ability to demonstrate cause and effect between two variables referred to as internal validity and to be able to generalize the results commonly referred to as external validity. There are several possible threats to both internal and external validities. However, knowing how to resolve the negative effects of the threats to validity is an integral part of building a reliable and successful study.

External Validity

External is the extent to which a researcher can generalize the results and knowledge from a given study to other measures and environmental conditions in the real world (Baldwin, 2018; Johnson, 1997). One major threat to external validity is population bias, generalizing the study results on African American women's hysterectomy and satisfaction, self-esteem, partner rejection to a larger group, or real-world phenomenon. The study will be robust to address the issue. By so doing, the study ensures that it adequately mirrors Black or African American women who have had a hysterectomy and their experiences about self-satisfaction, partner rejection, and the possible impact of socioeconomic issues.

Another possible threat to external validity in this study is selection bias. Selection bias answers the question about how representative the sample is to represent the population of interest. Selection bias may occur when the collected sample does not consider the group that is being studied. According to Johnson (2018), when there is a difference between groups studied, it may be possible that the results may be biased. To avoid the issue, Survey Monkey is used to collect data from participants. Survey Monkey allows the researcher to create screening logic to enable a proper filtration of African Americans and those with a hysterectomy. Survey Monkey will enable researchers to draw participants from different parts of the country rather than an area populated mainly by the treatment group. This methodology will ensure a representative sample of Black or African American women in the United States.

Internal Validity

Internal validity portrays confidentiality in each study that causes other factors or variables to explain the effect associations established in the study. For example, internal validity determines how well an alternate explanation of African American women's proposed findings and hysterectomy can be ruled in or out. The possible internal threats to validity in this study may be history and instrumentation. However, none of these factors or threats to internal validity are apparent in this study. These threats will not be considered because they do not have direct effects on the study variables. For example, there is no indication that any current event on African American women's hysterectomy might change during the data collection period that may alter the study results. Also, there will be no change in the instruments used between the beginning of the study and

the study's end. These internal factors are more critical in experimental studies than they are in quantitative studies. This study's study design is a non-experimental exploratory quantitative study and is free from internal threats to validity.

Ethical Procedures

In this study, the proposal uses only primary data from two survey tools, the RSES and BATH questionnaires. According to the Health Insurance Portability and Accountability Act, it is essential to fully understand the need for and importance of research participants' privacy, security, and confidentiality, popularly known as (HIPAA). In this study, the ultimate goal is to prioritize the participant's confidentiality by embracing Survey Monkey's intense confidentiality and protection principles. Survey Monkey has been in business and used by researchers and students for data collection for three decades. Their survey policy is voluntary, and participants have the right to refuse or quit at will.

The first step in this process will be to apply and obtain Walden's Institution Review Board (IRB). This department ensures that survey participants are treated with fairness, anonymity, confidentiality, and adequate rights and human protection. When IRB approves and issues permission to collect data, Survey Monkey will be contacted to start the collection process following IRB requirements. An email from Survey Monkey indicated that Participant confidentiality is a primary concern to them. As a result, consent is part of the survey tool for all participants willing to complete a survey.

A significant advantage of Survey Monkey is that they take the first step in protecting a participant's identification and security. Any survey going through Survey

Monkey must be reviewed and approved, ensuring Survey Monkey that participant safety, privacy, and confidentiality are maintained. According to Survey Monkey, the approval will be submitted for review before the questionnaires can be posted to the website when approved by IRB. Once participants have completed and signed the consent form, Survey Monkey will submit the request by email to their survey pool. The researcher will be the only person who can monitor the survey site using a secured username and password to protect the participants further. According to a Survey Monkey policy, an uncompleted survey on one attempt will be discarded to avoid pertinent information exposure. The Survey remains on Survey Monkey's secured database until the Survey is completed.

When the Survey is completed, two password-protected flash drives will be used to maintain copies of the survey output for security reasons. These copies will remain in a secured and locked-up cabinet. Safety rule requires that only the researcher will have access to the document and the storage key. Also, there is no plan to save a copy on the computer, mainly if more than one person uses the laptop and has the same password. When everything is over, these documents will be reserved for five years before destroying them permanently.

Summary

This chapter aims to introduce a suitable research design and sampling methodology or strategy that can be used to answer the three research questions regarding hysterectomy among Black or African American women. Two survey instruments will be used in the proposed Survey to determine the association between hysterectomy and self-

satisfaction and the association between hysterectomy and the feelings of partner rejection by African American men. The study will use the f-test ANCOVA statistical methodology to find an association between the covariables and the dependent and independent variables.

Using G*Power, a total of 128 participants were determined as an appropriate minimum sample size for analysis using IBM-SPSS software. Generalization and instrumentation were identified as the two main threats to external validity for this quantitative exploratory non-experimental study. Proper plans to address the external threats will be considered and addressed. The study does not show any viability for internal threats. Ethical consideration for studies with human participants is one of the major priorities and focus of this study. Step-by-step processes that will help protect participant's privacy, anonymity, and confidential information will be addressed. Few examples are having properly informed consent forms and obtaining permission from the Walden Institute Review Board (IRB). While Chapter 4 will utilize SPSS to display the study's final results, chapter 5 will conclude the study by interpreting the findings, establishing the study's implication to future studies, and demonstrating how the study can contribute to social change.

Chapter 4: Results

Introduction

Several studies on hysterectomy and African American women (e.g., Askew & Zam, 2013; Augustus, 2002; Dillaway, 2016; Robinson et al., 2017) have recommended additional studies to help address not only the impact of hysterectomy on African American women's self-esteem and satisfaction, but also how hysterectomy affects African American women's partners. As a result, the purpose of this quantitative retrospective study was to examine (a) how hysterectomy impacts African American women's self-esteem and satisfaction, (b) the relationship between hysterectomy and partner rejection, and (c) the association between hysterectomy and positive attitudes toward self. The independent variable in all three research questions of the study was hysterectomy type (i.e., ovaries removed, ovaries not removed, cervix removed, cervix not removed), and the dependent variables included (a) feelings of self-satisfaction, (b) feelings of partner rejection, and (c) positive attitudes toward "self."

The following three research questions and hypotheses were addressed:

RQ1: Is there an association between feelings of self-satisfaction, a component of self-esteem, and hysterectomy among Black or African American women ages 30–65 years, as measured by the Rosenberg Self-Esteem Scale (RSES) while controlling for educational attainment, marital status, and work status?

*Ho*1: There is no association between feelings of self-satisfaction, a component of self-esteem, and hysterectomy among Black or

African American women ages 30–65 years, as measured by the RSES while controlling for educational attainment, marital status, and work status.

*Hα*1: There is an association between feelings of self-satisfaction, a component of self-esteem, and hysterectomy among Black or African American women ages 30–65 years, as measured by the RSES while controlling for educational attainment, marital status, and work status.

RQ2: Is there an association between the partner's perceptions and attitudes about hysterectomy among Black or African American women ages 30–65 years, as measured by the Beliefs and Attitude Towards Hysterectomy (BATH) Questionnaire, while controlling for educational attainment, marital status, and work status?

*Ho*2: There is no association between the partner's perceptions and attitudes about hysterectomy among Black or African American women ages 30–65 years, as measured by the BATH Questionnaire, while controlling for educational attainment, marital status, and work status.

*Hα*2: There is an association between the partner's perceptions and attitudes about hysterectomy among Black or African American women ages 30–65 years, as measured by the BATH

Questionnaire, while controlling for educational attainment, marital status, and work status.

RQ3: When controlling for socioeconomic statuses (education, income, and occupation), is there an association between positive attitudes toward "self" and hysterectomy among Black or African American women ages 30–65 years, as measured by the RSES?

*Ho*3: When controlling for socioeconomic statuses (education, income, and occupation), there is no association between positive attitudes toward self and hysterectomy among Black or African American women ages 30–65 years, as measured by the RSES.

*Hα*3: When controlling for socioeconomic statuses (education, income, and occupation), there is an association between positive attitudes toward self and hysterectomy among Black or African American women ages 30–65 years, as measured by the RSES.

The following is a discussion of the data collection process. Also presented are the projects' population and sample and a demographic description of the sample. Demographic descriptions include frequencies and percentages for categorical (nominal) variables. Also presented are the testing of parametric assumptions for the statistical analysis and results of statistical testing. This chapter concludes with a discussion of the results of this project.

The Process of Data Collection

This study used data from Black or African American women between the ages of 30 and 65 years. The minimum sample size for this study as computed with G*Power was 128. All participants (n = 100) were individuals of African American origin who (a) had a hysterectomy, (b) were married or in a relationship during the hysterectomy, and (c) were between the ages of 30 and 65 years.

Participants were recruited using the snowball sampling methodology. Most participants were recruited by (a) passing fliers out at a heavily populated African American community Walmart, (b) allowing church members to send fliers to potential participants, and (c) allowing OBGYN doctors to send fliers to some of their patients. Surveys were hosted on Survey Monkey using computer or mobile phone technology. Fliers included a QR code to make it easier for participants to use their mobile phones to complete the survey.

Before the inception of the data collection process, I obtained permission from the Walden IRB. The entire IRB process, including change management forms, took approximately five months. Upon IRB approval, I built the survey on Survey Monkey. The survey used two robust and well-known instruments to frame the survey questions, following specific and detailed directions from the authors. One of the instruments was the BATH by Marvan; the other was the RSES. Participation in the survey was voluntary and anonymous. Data collection took 2 months to complete. The average completion rate was 77%.

Discrepancies in Data Collection

The only discrepancy between the original data collection plan as outlined in Chapter 3 and actual data collection was the use of a snowball data collection methodology, which was different from the original plan to use Survey Monkey Targeted Audience. For almost a year, I worked with the Survey Monkey Audience Team and was promised that they would provide enough participants to complete the survey. After the IRB had approved the data collection request, I contacted the Survey Monkey Audience Team, only to be told that they would no longer support the project because of the strict audience filtration and specificities based on age, race, and medical condition.

I submitted a change management form with the IRB and changed my plan to a snowball anonymous sampling method. Most participants were able to send the fliers to other Black or African American women who participated in the survey. Four demographic questions were used to ensure that only Black African American women who had had a hysterectomy participated in the survey. Survey Monkey's skip logic survey design methodology was used to disqualify participants who did not meet the minimum criteria. The survey was primarily focused on participants who met the inclusion criteria profiles for the study.

Baseline Descriptive and Demographic Sample

A total of 164 responses were received, exceeding the required sample size of 128. The data were inspected and verified using Microsoft Excel for inaccuracies and incomplete data. Furthermore, the data were checked for outliers based on each survey question's minimum and maximum values; there were none. Listwise deletion was used

with SPSS to handle missing data (Field, 2018). In this technique, only cases with complete data were included in the analysis (Filed, 2018). Incomplete data that did not meet the listwise algorithm were not used as part of the analysis. The descriptive and demographic characteristics of the participants were (a) age, (b) gender, (c) race/ethnicity, (d) education, (e) marital status, (f) income, and (g) employment.

Age

Participants' ages ranged between 30 and 65 years. While the minimum age was 30 and the maximum was 65 years, the mean age for all participants was 48 years. Age was among the inclusion criteria in the study. Participants could not be younger than 30 or older than 65. This range indicates the generations of Black or African American women primarily impacted by hysterectomy (Augustus, 2002; Roopina et al., 2020).

Gender

Gender was the second criterion for the study. As part of the requirements to qualify for the study, participants had to be Black or African American women who had a hysterectomy. I ran an analytical frequency count that showed that everyone who participated in the study's survey, including the incomplete and missing data, was African American. This was part of the inclusive criteria built into the survey using Survey Monkey's skip technology.

Race/Ethnicity

This study was focused on the impact of hysterectomy on Black or African American women 30 to 65 years of age. One hundred percent of the survey participants were African American or Black women diagnosed and treated for a hysterectomy. All

women showed great enthusiasm to take the survey and were directed to the Survey Monkey website using fliers and other snowball methodologies.

Education

Participants who completed the survey were asked about their education level at the time of their hysterectomy. The level of education ranged from less than a high school degree to a graduate degree. A statistical frequency count from an SPSS analysis was highest between associates degree holders (46, 28.0%) and the bachelor's degree holders (57, 34.8%). This is depicted in Table 3.

Table 3

Education

	Frequency	Percent
Less than a high school degree	4	2.4
High school degree or equivalent (GED)	13	7.9
Some college degree	10	6.1
Associate degree	46	28.0
Bachelor's degree	57	34.8
Graduate degree	34	20.7
Total	164	100.0

Marital Status

Being married or in a relationship during the hysterectomy was also one of the major inclusion criteria for the study. All participants were either married or in a relationship. As part of Research Question #2, this variable helped to determine the association between hysterectomy and partner rejection.

Income

Regarding income, less than half of the participants provided annual income (80, 48.8%). Most were in the $0 to $49,000 income range (56, 34.1%). This was followed by $50,000 to $124,999 (18, 11.0%); $125,000 to $199,999 (4, 2.4%); and $200,000 and up (2, 1.2%). Table 4 provides this information.

Table 4

Income

	Frequency	Percent
$0–$49,000	56	34.1
$50,000–$124,999	18	11.0
$125,000–$199,999	4	2.4
$200,000 and up	2	1.2
Total	80	48.8
Prefer not to answer	56	34.1
No response	28	17.1
Total	164	100.0

Employment

Regarding employment, most participants were employed working 40 or more hours per week (54, 32.9%). There were 41 (25.0%) participants who worked part time (1–39 hours per week). Regarding those not employed, 23 (14.0%) were looking for work, and 15 (9.1%) were not looking for work. Lastly, three (1.8%) participants were disabled and not looking for work. Table 5 provides this information.

Table 5

Employment

	Frequency	Percent
Employed, working 1–39 hours per week	41	25.0
Employed, working 40 or more hours per week	54	32.9
Not employed, looking for work	23	14.0
Not employed, not looking for work	15	9.1
Disable, not looking for work	3	1.8
No response	28	17.1
Total	164	100.0

Study Variables

The independent variable of this study was the type of hysterectomy, which included four categories: cervix not removed, cervix removed, ovaries not removed, and ovaries removed. Forty (8.5%) of the participants had their ovaries removed. This was followed by cervix removed (14, 8.5%) and ovaries not removed (7, 4.3%). There were 68 (41.5%) who had some other procedures. Table 6 provides this information.

Table 6

Type of Procedure

	Frequency	Percent
The cervix was not removed	1	.6
The cervix was removed	14	8.5
The ovaries were not removed	7	4.3
The ovaries were removed	40	8.5
Other	68	41.5
No response	34	20.7
Total	164	100.0

Regarding the dependent variables, three questions were used in the study to measure the level of agreement with the following items:

- On the whole, I am satisfied with myself.
- I feel like my partner has rejected me since my uterus was removed.
- I take a positive attitude toward myself.

The first item, "On the whole, I am satisfied with myself," was measured on a scale from 1 (*strongly agree*) to 4 (*strongly disagree*) and was used to address the first research question (Is there an association between feelings of self-satisfaction and hysterectomy among Black or African American women ages 30-65 years, as measured with the RSES, controlling for educational attainment, marital status, and work status?). Responses ranged from 1 (*strongly agree*) to 3 (*disagree*; $M = 1.18$, $SD = 0.41$). Most people strongly agreed with this statement (106, 64.6%) whereas 21 (12.8%) agreed. Only one (0.6%) disagreed. There were 36 (22.0%) participants who either did not respond or did not meet the inclusion criteria to complete the survey. See Table 7.

Table 7

On the Whole, I Am Satisfied With Myself

	Frequency	Percent
1: Strongly agree (SA)	106	64.6
2: Agree (A)	21	12.8
3: Disagree (D)	1	.6
Total	128	78.0
No response	36	22.0
Total	164	100.0

Note. $M = 1.18$; $SD = 0.41$.

The second item, “I feel like my partner rejects me since my uterus was removed,” was used to address the second research question (Is there an association between the feelings of partner rejection and hysterectomy among Black or African American women ages 30 – 65 years, as measured with Beliefs and Attitude Towards Hysterectomy (BATH), controlling for educational attainment, marital status, work status?). Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*; *M* = 3.66, *SD* = 1.10). Most people were neutral regarding this item, 43 (26.2%). This was followed by agreeing, 37 (22.6%), strongly agree, 34 (20.7%), disagree, 7 (4.3%), and strongly disagree, 7 (4.3%). The total agreement responses that include “agree” and “strongly agree” were 71 (43.3%). There were 36 (22.0%) that either did not respond or could not complete the survey due to the inclusion criteria. See Table 8.

Table 8

I Feel Like My Partner Rejects Me Since My Uterus Was Removed

	Frequency	Percent
1 Strongly disagree	7	4.3
2 Disagree	7	4.3
3 Neutral	43	26.2
4 Agree	37	22.6
5 Strongly agree	34	20.7
No response	36	22.0
Total	164	100.0

Note. *M* = 3.66; *SD* = 1.10.

The third item, "I take a positive attitude toward myself," was used to address the third research question (When controlling for socioeconomic statuses education, income, and occupation, is there an association between positive attitudes towards "self" and

hysterectomy among Black or African American women ages 30 – 65 years, as measured with Rosenberg self-esteem scale?). Responses ranged from 1 (*strongly agree*) to 4 (*strongly disagree*; *M* = 1.64, *SD* = 0.62). Most participants strongly agreed with this item, 53 (32.3%). This was followed by agree, 71 (43.3%); strongly disagree, 3 (1.8%); and disagree, 1 (0.6%). An overwhelming 124 (75.6%) participants agreed about having positive attitudes towards themselves despite some negativities about hysterectomies. There were 36 (22.0%) people that did not respond. See Table 9.

Table 9

Self-Esteem 10: I Take a Positive Attitude Toward Myself

	Frequency	Percent
1 Strongly Agree (SA)	53	32.3
2 Agree (A)	71	43.3
3 Disagree (D)	1	.6
4 Strongly Disagree (SD)	3	1.8
No response	36	22.0
Total	164	100.0

Note. *M* = 1.64; *SD* = 0.62.

Study Results

Analysis of covariance (ANCOVA) was used to address the three research questions. The study of covariance (ANCOVA) can be conceived of as a one-way ANOVA with added covariate variables. These covariates are theorized to be directly related to the dependent variable; therefore, including them in the analysis can help detect differences across independent variable groups (Field, 2018). An ANCOVA is used to see any statistically significant differences between two or more independent (unrelated) groups' adjusted population means (Field, 2018).

Prior to conducting the analysis, there were parametric assumptions that had to be tested. These assumptions included homogeneity of regression slopes, the residuals should be approximately normally distributed for each independent variable group, and there should be no significant outliers in the independent irregular groups. The assumption of homogeneity of regression slopes was tested by testing the interaction terms between the covariates and each of the three dependent variables for significance. None of the interaction terms were significant ($p > .05$); thus, there was no violation of the homogeneity of regression slopes assumption (Laerd Statistics, 2021).

The normality of residuals of each ANCOVA for the respective research questions were assessed by examining skewness and kurtosis values. All skewness values fell between -3 and +3 and kurtosis values between -7 and +7, thus supporting normality (Hair et al., 2010). Table 10 provides these results.

Table 10

Skewness and Kurtosis Statistics of Analysis of Covariance Residuals by Research Question

Treatment		*N*	Skewness	Kurtosis
The cervix was removed	RQ1	13	.188	-2.313
	RQ2	13	-.046	-1.979
	RQ3	13	-.333	-1.989
The ovaries were not removed	RQ1	7	-1.436	2.347
	RQ2	7	.474	-.556
	RQ3	7	1.204	-.645
The ovaries were removed	RQ1	40	2.746	5.905
	RQ2	40	-.666	.684
	RQ3	40	-.197	-1.962
Other	RQ1	67	2.019	3.456
	RQ2	67	-.222	-.204
	RQ3	67	1.290	3.126

Lastly, outlier detection was assessed by calculating standardized residuals for each group of the independent variables. All standardized values were within -3 to +3. Thus, there were no outliers in the data. This is depicted in Table 11 below.

Table 11

Ranges of Standardized Residuals by Group and Research Question

		N	Min	Max
The cervix was removed	RQ 1	13	-1.27	1.40
	RQ 2	13	-1.94	1.55
	RQ 3	13	-1.06	.81
The ovaries were not removed	RQ 1	7	-.17	.07
	RQ 2	7	-1.48	2.30
	RQ 3	7	-.62	1.24
The ovaries were removed	RQ 1	40	-.43	2.30
	RQ 2	40	-2.78	1.46
	RQ 3	40	-1.04	.83
Other	RQ 1	67	-.87	4.33
	RQ 2	67	-2.44	1.47
	RQ 3	67	-1.32	3.79

ANCOVA was performed to address the first research question and hypotheses:

RQ1: Is there an association between the feelings of self-satisfaction and hysterectomy among Black or African American women ages 30-65 years, as measured with Rosenberg self-esteem scale, controlling for educational attainment, marital status, and work status?

Ho1: There is no association between the feelings of self-satisfaction and hysterectomy among Black or African American women ages 30-65 years, as measured with Rosenberg self-esteem scale, controlling for educational attainment, marital status, and work status.

Ha1: There is an association between the feelings of self-satisfaction and hysterectomy among Black or African American women ages 30-65 years, as measured with Rosenberg self-esteem scale, controlling for educational attainment, marital status, and work status.

After controlling for educational attainment, marital status, and work status, the mean responses to the item "On the whole, I am satisfied with myself" did not vary significantly based on the type of hysterectomy, $F(4, 128) = 1.989$, $p = .101$. See Table 12.

Table 12

Dependent Variable: Self-Esteem 1—On the Whole, I am Satisfied With Myself

Source	Type III sum of squares	*df*	Mean square	*F*	*p*	η2
Corrected model	1.874[a]	11	.170	1.041	.416	.090
Intercept	14.594	1	14.594	89.134	.000	.435
Type of procedure	1.303	4	.326	1.989	.101	.064
Less HS	.097	1	.097	.590	.444	.005
HS or GED	.033	1	.033	.202	.654	.002
Some college	.096	1	.096	.587	.445	.005
Associate's	.001	1	.001	.006	.937	.000
Bachelor's	.010	1	.010	.063	.802	.001
Part time	.000	1	.000	.000	.999	.000
Full time	.000	1	.000	.000	.987	.000
Error	18.993	116	.164			
Total	199.000	128				
Corrected total	20.867	127				

The estimated marginal means are depicted in Table 13. The mean response was greatest for those who had the cervix removed ($M = 1.441$, $SE = 0.41$) and least for

ovaries not removed (M = 1.00, SE = 0.06). Lower scores indicate more satisfaction with themselves. Thus, those who did not have the ovaries or cervix removed seemed more satisfied with themselves than those who had their ovaries removed. However, these differences were not significant.

Table 13

Marginal Means for "On the Whole, I Am Satisfied With Myself"

			95% confidence interval	
Type of procedure	*M*	*SE*	Lower bound	Upper bound
The cervix was not removed	1.001	.409	.192	1.810
The cervix was removed	1.441	.113	1.218	1.664
The ovaries were not removed	1.000	.152	.699	1.302
The ovaries were removed	1.104	.064	.976	1.231
Other	1.196	.050	1.097	1.294

ANCOVA was performed to address this second research question and hypotheses:

RQ2: Is there an association between the feelings of partner rejection and hysterectomy among Black or African American women ages 30 – 65 years, as measured with Beliefs and Attitude Towards Hysterectomy (BATH), controlling for educational attainment, marital status, work status?

Ho2: There is no association between the feelings of partner rejection and hysterectomy among Black or African American women ages 30 – 65 years, as measured with Beliefs and Attitude Towards Hysterectomy (BATH), controlling for educational attainment, marital status, work status.

Ha2: There is an association between the feelings of partner rejection and hysterectomy among Black or African American women ages 30 – 65 years, as measured with Beliefs and Attitude Towards Hysterectomy (BATH), controlling for educational attainment, marital status, and work status.

After controlling for educational attainment, marital status, and work status, the mean responses to the item "I feel like my partner rejects me since my uterus was removed" did vary significantly based on the type of hysterectomy, $F(4, 128) = 3.335$, $p = .013$. See Table 14.

Table 14

Dependent Variable: Self-Esteem 1—On the Whole, I Am Satisfied With Myself

Source	Type III sum of squares	*df*	Mean square	*F*	*p*	η2
Corrected model	22.201[a]	11	2.018	1.792	.063	.145
Intercept	121.498	1	121.498	107.854	.000	.482
Type of procedure	15.030	4	3.757	3.335	.013	.103
Less HS	.511	1	.511	.454	.502	.004
HS or GED	.100	1	.100	.089	.766	.001
Some college	.959	1	.959	.851	.358	.007
Associate’s	2.892	1	2.892	2.567	.112	.022
Bachelor’s	2.870	1	2.870	2.547	.113	.021
Part time	.700	1	.700	.622	.432	.005
Full time	1.050	1	1.050	.932	.336	.008
Error	130.674	116	1.127			
Total	1864.000	128				
Corrected total	152.875	127				

[a] *R* squared = .145 (adjusted *R* squared = .064). [b] Computed using alpha = .05.

Pairwise comparisons appear in Table 15. There were significant differences in mean agreement to the statement, “I feel like my partner rejects me since my uterus was removed.“ Females that had their ovaries removed felt that their partner rejects them since they had their ovaries removed more so than those that did not have them removed. This was a significant mean difference of 1.427 (p = .017). Additionally, females who had some "other" procedure felt that their partner rejected them more than those who did not have their uterus removed. This was a significant mean difference of 1.345 (p = .022).

Table 15

Pairwise Comparisons for “I Feel Like My Partner Rejects Me Since My Uterus Was Removed”

(I) Procedure type	(J) Procedure type	Mean difference (I-J)	*SE*	*p*	95% confidence interval for difference	
					Lower bound	Upper bound
Ovaries nor removed	Cervix not removed	-1.761	1.170	1.000	-5.109	1.587
	Cervix removed	-.831	.510	1.000	-2.291	.628
	Ovaries removed	-1.427*	.443	.017	-2.696	-.158
	Other	-1.345*	.429	.022	-2.573	-.118

ANCOVA was performed to address this third research question and hypotheses:

RQ3: When controlling for socioeconomic statuses (education, income, and occupation), is there an association between positive attitudes towards "self" and hysterectomy among Black or African American women ages 30 – 65 years, as measured with Rosenberg self-esteem scale?

Ho3: When controlling for socioeconomic statuses (education, income, and occupation), there is no association between positive attitudes towards "self" and hysterectomy among Black or African American women ages 30 – 65 years, as measured with Rosenberg self-esteem scale.

H13: When controlling for socioeconomic statuses (education, income, and occupation), there is an association between positive attitudes towards "self" and hysterectomy among Black or African American women ages 30 – 65 years, as measured with Rosenberg self-esteem scale.

After controlling for education, income, and occupation, the mean responses to the item “I take a positive attitude toward myself.” did not vary significantly based on the type of hysterectomy, $F(4, 76) = 0.701$, $p = .594$. See Table 16.

Table 16

Dependent Variable: I Take a Positive Attitude Toward Myself

Source	Type III sum of squares	*df*	Mean square	*F*	*p*	η2
Corrected model	6.648[a]	13	.511	1.393	.188	.226
Intercept	3.238	1	3.238	8.820	.004	.125
Procedure type	1.030	4	.257	.701	.594	.043
Less HS	.000	0	.	.	.	.000
HS or GED	.165	1	.165	.450	.505	.007
Some college	.522	1	.522	1.421	.238	.022
Associate's	.066	1	.066	.181	.672	.003
Bachelor's	.087	1	.087	.236	.629	.004
Part time	.305	1	.305	.832	.365	.013
Full time	1.516	1	1.516	4.130	.046	.062
$0–49.9K	.135	1	.135	.368	.546	.006
$50K–124.9K	.386	1	.386	1.051	.309	.017
125K–199.9K	.127	1	.127	.347	.558	.006
Error	22.759	62	.367			
Total	235.000	76				
Corrected total	29.408	75				

Summary

The purpose of this quantitative study was to explore whether the election of hysterectomy of African American or Black women aged between 30 and 65 years was associated with (a) self-satisfaction, a component of self-esteem; (b) the partner's perceptions and attitudes about hysterectomy; and (c) African American women's socioeconomic statuses. After controlling for demographic factors, there were significant differences in mean agreement to the statement, "I feel like my partner rejects me since my uterus was removed. " Females that had their ovaries removed felt that their partners reject them since they had their ovaries removed more so than those that did not have

them removed. This showed a significant mean difference of 1.427 (p = .017). Additionally, females who had some "other" procedure felt that their partner rejected them more than those who did not have their uterus removed. This was a significant mean difference of 1.345 (p = .022).

What follows in Chapter 5 is a discussion as to how the results of this study are interpreted in the context of the theoretical framework. Limitations of the results of the study are discussed. Additionally, recommendations for future research are discussed.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Hysterectomy is a major medical issue affecting millions of individuals in the United States (Fortin et al., 2018). However, representing the existence of the condition by race, hysterectomy is described as disproportionally impacting African American women more than any other race in the United States (Aerts et al., 2020). Researchers have reported that African American women with hysterectomy are usually young, such that the surgery affects their childbearing ability (Aerts et al., 2020; Bower et al., 2009; Callegari et al., 2019). Given these negative effects, most African American women and men have had some negative perceptions about hysterectomy (Doll et al., 2016). Current literature has inadequately investigated the relationship between hysterectomy and self-esteem among African American women aged 30 to 65 (Callegari et al., 2019).

The purpose of this quantitative correlational study was to explore whether hysterectomy of African American or Black women aged 30 to 65 years is associated with self-satisfaction, a component of self-esteem; the partner's perceptions and attitudes about hysterectomy; and Black or African American women's socioeconomic statuses. A quantitative study was conducted, given that the focus of the current study was to investigate the relationship between study variables. After data analysis, the study findings revealed that satisfaction with hysterectomy was not significant in African American women. The findings revealed that African American women were s concerned with hysterectomy, especially when their ovaries or cervix had been removed. The findings suggested that African American women had low self-esteem after undertaking a

hysterectomy. Therefore, it was concluded that hysterectomy affects African American women's self-esteem, particularly when their partners disapprove.

Interpretation of Findings

Exploring the relationship between hysterectomy, self-esteem, and satisfaction among African American women was the focus of this study. Questionnaires were used to collect data from participants. In addition, quantitative methods were used to analyze data responses. After conducting the analysis, the following findings were reported per research questions.

Research Question 1

RQ1: Is there an association between self-satisfaction, a component of self-esteem, and hysterectomy among Black or African American women aged 30 to 65 years as measured by the Rosenburg Self-Esteem Scale while controlling for educational attainment, work status, and marital status?

ANCOVA was used to analyze the data collected on the first research question and hypothesis. Based on the analysis conducted, the study findings revealed no association between the feeling of self-satisfaction and hysterectomy among Black or African American women aged 30 to 65 years as measured with the RSES, controlling for educational attainment, marital status, and work status. As such, the null hypothesis was accepted because the feeling of satisfaction after hysterectomy was statistically insignificant, $F(4,128 = 1.989, P = 0.101)$. The findings demonstrated that African American women were not satisfied with themselves after undergoing surgery or

hysterectomy. In the study analysis, educational attainment, marital status, and work status were controlled.

The current study findings are consistent with previous literature identifying a negative association between satisfaction with oneself and hysterectomy regardless of the type. For instance, Callegari et al. (2019) conducted a qualitative study to investigate the perceptions of women regarding hysterectomy after birth. After surveying a total of 315 women who had undergone hysterectomy, the researchers reported that regardless of the type, women were less satisfied with themselves after undergoing hysterectomy, given that it impacted their ability to bear children. Equally, the findings are concurrent with Bower et al. (2009), who conducted a quantitative study between self-satisfaction and hysterectomy among women about their body image. The results revealed that women who had undergone hysterectomy reported worse body image, self-esteem, and dyadic adjustments than healthy women.

Similarly, after conducting a literature review on the effects of hysterectomy on self-esteem among Turkish women, Askew and Zam (2013) established that hysterectomy had adverse effects on women's self-esteem or self-satisfaction as it affected their gynecological health. Additionally, Augustus (2002) conducted a quantitative study to investigate the effects of hysterectomy on self-esteem and marital satisfaction among women. After conducting the analysis, Augustus reported that hysterectomy was linked to low self-esteem and marital dissatisfaction among women, especially when their partners disapproved of their surgery. The current study findings are also supported by a study conducted by Aerts et al. (2020). Aerts et al. (2020) sought

to investigate the relationship between self-esteem and hysterectomy among women. The study used a semi structured experimental design with a pre-posttest on a sample of 60 women using the RSES. After conducting the analysis, Aerts et al. found that most women were less satisfied with their bodies after undergoing hysterectomy, which compromised their self-esteem given that their partners would disapprove of their practice, despite their gender, age, or socioeconomic status.

The current findings contribute to the current literature in various ways. For instance, the study addressed the first research question, which targeted the relationship between feelings of self-satisfaction and hysterectomy of African American women aged 30 to 65 years as measured with the RSES while controlling for educational attainment, marital status, and work status. In addressing this question, the study findings revealed that African American women aged 30 to 65 years were less satisfied with hysterectomy as it affected their sexuality, thereby compromising their self-esteem. The results, therefore, add to the current body of literature valuable insights on the relationship between hysterectomy and self-esteem or feelings of self-satisfaction among African American women in an area where limited understanding existed before the current study. However, the population is disproportionately affected by hysterectomy (Aerts et al., 2020).

The findings imply that changes in body image after hysterectomy compromised African American women's feelings of self-satisfaction or self-esteem in instances where hysterectomy negatively affected their sexuality, ovaries, and uterus; or the surgery was disapproved of by their partners. The implication is that the low esteem resulting from

body image and disapproval from partners compromises feelings of self-satisfaction among African American women after undergoing hysterectomy. Overall, findings relating to the first research question demonstrate a negative relationship between self-esteem and hysterectomy among African American women aged 30 to 60 years.

Research Question 2

RQ2: Is there an association between the feelings of partner rejection and hysterectomy among Black or African American women aged 30 to 65 years, as measured with BATH, controlling for educational attainment, marital status, and work status?

Data collected on this question were analyzed using ANCOVA. After conducting data analysis, the alternative hypothesis, which predicted that there is an association between feelings of partner rejection and hysterectomy among Black or African American women aged 30 to 65 years, as measured with BATH, controlling for educational attainment, marital status, and work status, was accepted. The study findings revealed a statistically significant relationship between partner rejection following hysterectomy, $F(4,128) = 3.335$, $P = 0.013$. Regardless of the type of hysterectomy, participants reported increased rejection from their partners following the hysterectomy that led to the removal of the uterus. The findings also revealed that their partners rejected them more often ($P = 0.22$) than women who did not have their uterus removed during a hysterectomy.

The current study findings are consistent with current literature that has established rejection among women after undergoing hysterectomy. For instance,

Dillaway (2016) conducted a qualitative study to investigate the perceptions of women regarding hysterectomy using a sample of 215 women. After analyzing the data collected using a thematic approach, the investigators established that most women who participated in the study reported rejection from their partners after undergoing hysterectomy procedures. Similar results were also reported in a systematic review conducted by Callegari et al. (2019) on women's perceptions of hysterectomy and marital satisfaction. After conducting the analysis, the Callegari and colleagues (2019) found an increase in partner rejection or disapproval following a hysterectomy procedure that affected women's sexuality and childbearing ability.

In a different study, Dean et al. (2016) also sought to investigate the perceptions of women regarding their acceptance by their partners following a hysterectomy procedure. The findings revealed that 68% of women reported rejection from their partners following hysterectomy procedures that affected their sexuality or body image. Furthermore, the disapproval from their partners resulted in low self-esteem and low feelings of dissatisfaction among women, especially when their partners openly described their sexuality or body image after undergoing a hysterectomy (Dean et al., 2016).

The current study results have several implications and contributions to the current literature. First, the study findings contributed to the current body of literature by revealing that majority of African American women that undergo hysterectomy face rejection from their partners after their body image changes and their sexuality is compromised. The findings are important to the current literature, given that this area had been inadequately studied before the present study, thus addressing the gap in the

literature. Second, the study findings imply that women are likely to reject their partners if hysterectomy procedures affect their sexuality, body image, and childbearing ability. Third, increased disapproval from their partners implies that women are likely to have low self-esteem after hysterectomy procedures.

Research Question 3

RQ3: When controlling for socioeconomic statuses (education, income, and occupation), is there an association between positive attitudes towards "self" and hysterectomy among African American women aged 30 to 65 years as measured with Rosenburg self-esteem scale?

After conducting the analysis, the null hypothesis, when controlling the socio-economic statuses (education, income, and occupation), there is no association between positive attitudes towards "self" and hysterectomy among black or African American women aged 30 to 65 years as measured with Rosenburg self-esteem scale. The findings imply that participants had no positive sense of "self" after undergoing hysterectomy. The findings are supported by Doğanay et al. (2019), who found that women had a low sense of self after undergoing hysterectomy. Fortin et al. (2018) also noted that women who reported a low sense of self after undergoing hysterectomy felt like their sexuality was compromised leading to outright rejection from their partners.

Limitations of the Study

The present study had several limitations. The first limitations relate to the generalizability of the study results. In particular, the researcher used a limited sample size of 128 participants. The limited sample size may have been less representative of the

entire population. In such instances, the study findings may face generalizability issues when being transferred to another setting. In addition, the generalizability of the study findings may be limited by the geographical settings of the study findings. In particular, the current study was limited to a specific geographical location. The essence is that only participants of these geographical locations were recruited to take part in this research. This automatically discriminated against potential participants from other regions. In such instances, there is a possibility that the study results in generalizability may be limited to the current study settings and the population used.

Another limitation relates to the trustworthiness of the responses from participants. The researcher used volunteers to participate in the data collection process. The implication is that the researcher may have limited control over participant's responses. Self-reported data from volunteers may be dishonest (Field, 2015). In such cases, the study findings are likely to be compromised (Field, 2015).

The validity and reliability of the data collection instruments may also be another limitation of the current study. In particular, the researcher used existing instruments to conduct the survey. The limitations and weaknesses in such instruments may have been transferred to the current study. Another limitation relates to the methodology selected which in this case was quantitative research method. Although accurate, the quantitative research method does not offer the researchers the opportunity to investigate participant's perceptions or views about the problem or question under study. There is a possibility that participants may find it difficult to express their perceptions of hysterectomy using survey instruments as it limits their ability to describe and detail their

perceptions. Missing or incomplete data could be another limitation linked to the current study. This has the ability to compromise the study findings given the incomplete responses that may not be reliable for analysis.

Recommendations

The following recommendations are advanced in line with the study findings' strengths and weaknesses. First, the study was limited by the sample size and geographical location used. The researchers used a limited sample of 128 participants. Second, the sample size was homogeneous, given that participants were drawn from one primary location. A homogeneous sample size that is small has negative impacts on the generalizability of the study findings. In view of this limitation, the researcher recommends further studies to explore and replicate the current study using a large geographic location with a diverse sample size. Quantitative studies require a large sample size to support the generalizability of the study results to other settings. By using a large sample size in future studies, there is a possibility that the researchers will enhance the generalizability of the study findings by extending the study to a large sample size and other geographical locations.

The study results were also limited by racial scope. In particular, the current study investigated the relationship between hysterectomy and self-esteem among African American women. The implications are that only participants from one race, African American women, were eligible to participate in the study. The focus on one race automatically excluded other races. Therefore, further studies that allow the participation or inclusion of participants from other races is highly recommended. This will provide an

opportunity for researchers to compare findings from one race to participants from other racial backgrounds. Such comparison may provide valuable insights that may be used to offer recommendations for further studies. There is a need for further research to be conducted in different racial backgrounds and comparisons made against the current study findings using a heterogeneous racial sample.

Another limitation linked to this study is the issues of trustworthiness among participants. The current study utilized volunteers which raised the question of the validity and honesty of the responses given as it is likely that some of the responses may be inaccurate or dishonest. Therefore, future researchers may opt to compensate participant's participation in studies to avoid overreliance on volunteers for their research time and motivate them to be honest with their responses.

Another limitation was related to the methodology used. A quantitative research methodology with a correlational research design was used in the current study. Quantitative studies are used when researchers intend to investigate relationships between variables using numbers. However, the methodology may have been inadequate in this study given that the focus included investigating participant's perceptions. Investigating participant's views, perceptions, and opinions of a phenomenon are inadequately studied through quantitative methods (Shieh, 2017). It is therefore recommended that researchers in the future focus on using alternative methodologies such as qualitative. Qualitative methodology effectively explores participants' perceptions given that data collection is done through semi-structured interviews to solicit in-depth data (Shieh, 2017). Through qualitative research methodology, researchers use semi-structured interviews to capture

in-depth descriptions of participants regarding their perceptions of hysterectomy and self-esteem. Lastly, it is recommended that the validity and reliability of research instruments used in this study be re-examined. The aim is to ensure that the instruments are reliable and valid to investigate the topic by researchers in future and offer dependable results. Using valid and reliable instruments improves the trustworthiness and dependability of the study findings.

Implications

The current study findings have several positive social change implications. The implications of the study findings are addressed in terms of individuals, organization, family, and society level. At an individual level, the study results showed that hysterectomy affects an individual's self-esteem. The implication is that individuals may use the study findings to identify several coping challenges linked to hysterectomy. At an organizational level, the study findings revealed that women face rejection after hysterectomy. The study results may be used in healthcare facilities to offer emotional support to women facing rejection from their partners. The findings also have implications at the family level. It was established that hysterectomy affects women's sexuality and their childbearing ability. This may have negative impacts on the family. The study findings may be used as a benchmark for family decision-making processes regarding hysterectomy to avoid conflicts. The study may also have positive societal change regarding the management of hysterectomy. The study findings may inform public health policymakers on how to introduce necessary measures to govern hysterectomy. This may result in reduced stigma among women, whereby most of them

are rejected after undergoing hysterectomy. The policies could include public health personnel mobilizing people and educating them on the need to embrace hysterectomy in their partners and avoid rejecting them, which could lower their self-esteem. The study findings have direct contributions to public health practice by providing valuable information that can be used to manage obesity among patients, such as physical exercise and use of labels.

The study also has theoretical contributions especially on the ST that informed the current study. The theory explained how individuals ground their behaviors or decisions on social groups' acceptance or rejection within a cultural entity. The theory is based on two variables that influence behavior and decision-making among individuals: self-esteem and satisfaction. The theory is based on the premise that self-esteem and sense of satisfaction are social inclusion or exclusion in a social group. As a result, individual's self-esteem and self-satisfaction are attached to their health condition and decision-making processes. The current study findings extend this theory by establishing that individuals' self-esteem and self-satisfaction are linked to their medical conditions. In addition, the findings suggested that decisions regarding hysterectomy influenced women's self-esteem and sense of satisfaction. Such findings contribute to the theory by confirming that medical conditions and decisions affect an individual's self-esteem. For instance, the researcher found that ST could explain the impact of hysterectomy on African American women's self-esteem regarding their rejection and acceptance in their family or their partners.

Conclusions

The current study revealed that hysterectomy is negatively related to self-esteem among women. Women who undergo hysterectomy resulting in the removal of their uterus and changes in their body image are likely to have low self-esteem and a sense of satisfaction given disapproval or rejection from their partners.

Given the findings, policymakers need to initiate appropriate mechanisms that may be used to sensitize the public about hysterectomy as it may reduce rejection and disapproval from family members, leading to low self-esteem among African American women. In addition, there is also a need to offer social and psychological support to women after hysterectomy to cope with challenges after undergoing the procedures. Overall, the study findings revealed that African American women have negative perceptions of hysterectomy, resulting in low self-esteem and a sense of dissatisfaction.

The field of public health will benefit from a study that will help address problematic issues relative to low self-esteem, satisfaction, and partner rejections among women who have had a hysterectomy. According to the Journal of Public Health Research (2020), women who have had a hysterectomy may have to overcome numerous problems related to sexual, reproductive, and possible low self-esteem, in addition to their quality of recovery (Afiya et al., 2020).

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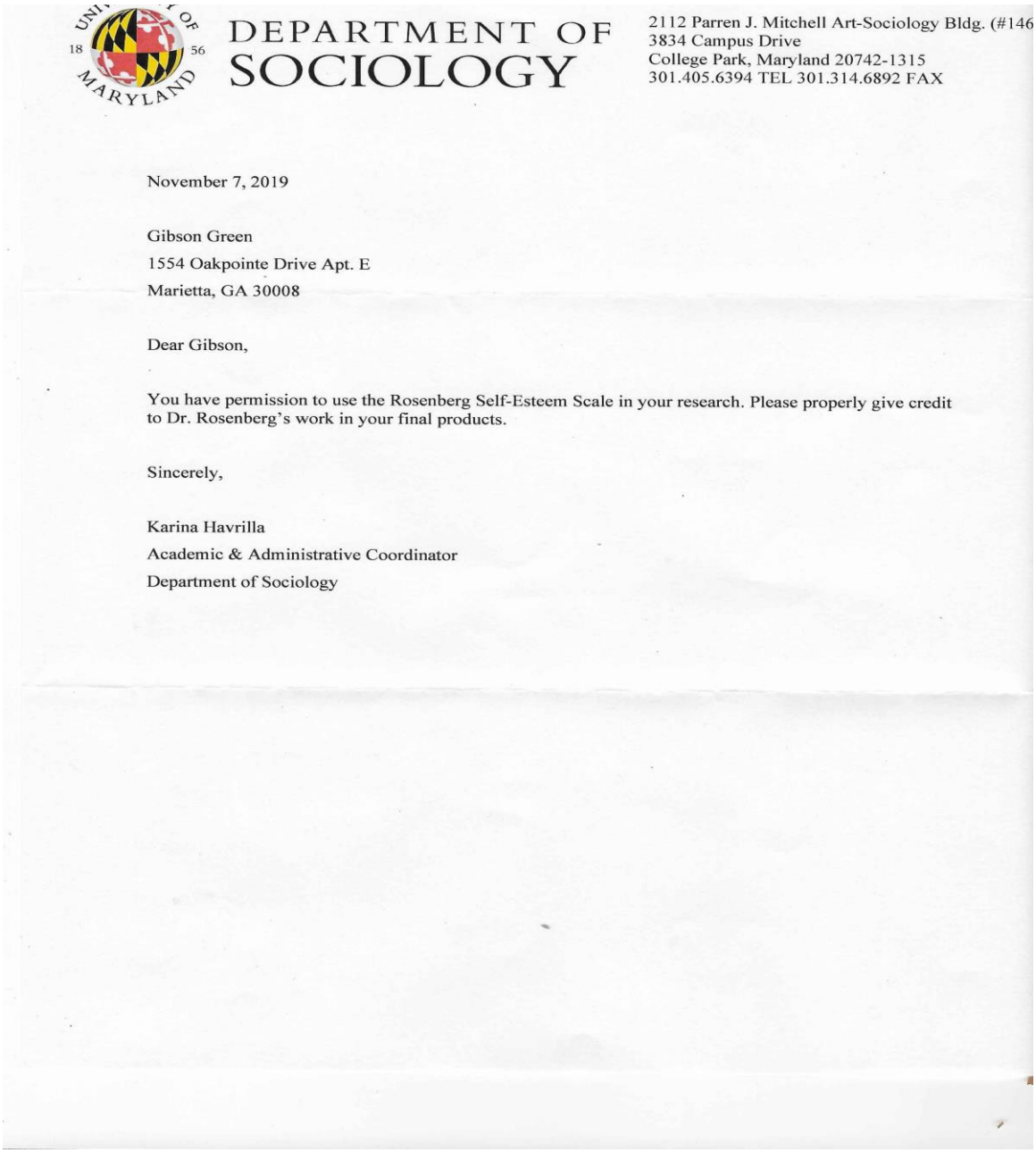
Appendix A: Permission to Use Rosenberg Self-Esteem Scale Questionnaire



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November 7, 2019

Gibson Green
1554 Oakpointe Drive Apt. E
Marietta, GA 30008

Dear Gibson,

You have permission to use the Rosenberg Self-Esteem Scale in your research. Please properly give credit to Dr. Rosenberg's work in your final products.

Sincerely,

Karina Havrilla
Academic & Administrative Coordinator
Department of Sociology

Appendix B: Permission to Use Beliefs and Attitudes Toward Hysterectomy

Publication Cooperation

From: Nova Science Publishers, Inc. (nova.main@novapublishers.com)

To: green_gibson@yahoo.com

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Dear Gibson,

Good day. Thank you for your email message. We are happy to grant you permission to use the questionnaire free of charge provided a credit to Nova is given each time.

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Stella

Stella Rosa
Administrative Assistant to Nadya S. Columbus
Nova Science Publishers, Inc.

Appendix C: Rosenberg Self-Esteem Scale Questionnaire

Rosenberg Self Esteem Scale

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, check "SA." If you agree with the statement, check "A." If you disagree, check "D." If you strongly disagree, check "SD."

	Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
1. On the whole, I am satisfied with myself.				
2. At times, I think I am no good at all.				
3. I feel that I have a number of good qualities				
4. I am able to do things as well as most other people.				
5. I feel I do not have much to be proud of.				
6. I certainly feel useless at times.				
7. I feel that I'm a person of worth, at least on an equal plane with others.				
8. I wish I could have more respect for myself.				
9. All in all, I am inclined to feel that I am a failure.				
10. I take a positive attitude toward myself.				

Appendix D: Beliefs and Attitudes Toward Hysterectomy Questionnaire

Beliefs and Attitudes toward Hysterectomy Questionnaire (BATH)

Age_____ Birthplace _____ Place of residence_____

Education (highest grade completed) _____ Number of children_____

Number of years Married_____ Occupation _____ Cause of hysterectomy_____ Age when you had hysterectomy (or year of hysterectomy) _____

When you had your hysterectomy, did you live with a partner? Yes ____No _____

Was the hysterectomy performed before or after menopause? Before_____ After_____

Type of Hysterectomy: ( ) The cervix was not removed ( ) the cervix was removed ( ) the ovaries were not removed ( ) the ovaries were removed.

If the ovaries were removed do you use hormone replacement therapy? Yes____ No _____ how long did you receive hormone replacement therapy? _____ or are you still using hormone replacement therapy?

Instructions: Below are a list of statements to which we ask you to respond by placing an "x" consider the options that is closest to what you think. The options are: "Strongly disagree" (absolute disagreement) "disagree", " neither agree nor disagree," "agree" and "strongly agree" (absolute agreement).

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1	I feel worthless since my uterus was removed					
2	I do not feel like a good wife since my uterus was removed					
3	I enjoy sex more since my uterus was removed					
4	I do not feel like a good wife since my uterus was removed					
6	I feel like my partner rejects me since my uterus was removed					
8	I feel neglected since my uterus was removed					
9	I feel content since my uterus was removed					
12	I feel less feminine since my uterus was removed					

14	I feel hollow inside since my uterus was removed					
16	I feel empty since my uterus was removed					
17	I no longer feel like a woman since my uterus was removed					
18	I feel ashamed because my uterus as removed					
27	I am sad because my uterus was removed					