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### An Examination of the Health Promoting Behavior of African American Women

Donna J. Thomas

St. John Fisher University, [djt08127@students.sjf.edu](mailto:djt08127@students.sjf.edu)

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# An Examination of the Health Promoting Behavior of African American Women

## Abstract

There is a sparse amount of data to substantiate the relationship between the African American women's ability to practice preventative healthcare, reduce their risk to chronic disease, and improve their quality of life. A phenomenological approach was employed in this qualitative study to examine the factors that influence African American women's health promoting behaviors and lifestyle choices such as regular physical activity, good nutrition, routine health screenings, and other health-promoting behaviors. These factors included the women's perceived benefits and barriers to health promoting behaviors, self-efficacy, interpersonal and situational influences. In order to gain insight into the factors associated with health promotion, two focus groups were used to examine the lived experiences of the women. Using body mass index (BMI) as a guide, the researcher was able to compare and contrast the health promoting behaviors of one group that had a BMI within the normal range versus the other group of women with a BMI in the obese range. A purposeful sample of eight African American women between the ages of 30 - 45 years were used. The women in this study experienced continuous challenges implementing and sustaining health promotion activities to benefit their overall health over a long period of time. The factors that interfered were cultural traditions, competing demands on their time, and their own desire and ability to adhere to health promoting activities. With this information, the researcher made recommendations to implement future culturally appropriate interventions and health promotion programming to promote good health and lower the risk of chronic diseases in this population.

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An Examination of the Health Promoting Behavior of African American Women

By

Donna J. Thomas

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Ed.D. in Executive Leadership

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Dr. Janice Girardi

Committee Member

Dr. Jennifer Schulman

Ralph C. Wilson, Jr. School of Education  
St. John Fisher College

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## **Dedication**

I dedicate this dissertation in loving memory of my parents, Basil and Imogene Thomas. I thank them for setting a firm foundation for me to flourish. A heartfelt thank you to my sister Paula for her support, understanding, and assistance when I needed it. I appreciate Brian for his encouragement, patience, and helping me stay calm and focused during this process.

## **Biographical Sketch**

Donna Thomas is the president and CEO of her company SmartFit, Inc. which offers health promotion and fitness services that focus on the prevention of disease and disability. She has over 30 years' experience as an administrator and health educator. Ms. Thomas attended Springfield College, graduating in 1984 with a Bachelor's of Science in Rehabilitative Services. Donna completed her Masters of Science in Community Health in 1991 from Long Island University.

Donna Thomas began her doctoral studies in May 2014 with St. John Fisher College in the Ed.D. Program in Executive Leadership. Ms. Thomas pursued her research examining the health promoting behavior of African American women under the direction of Dr. Janice Girardi and Dr. Jennifer Schulman and received the Ed.D. degree in 2016.

## **Abstract**

There is a sparse amount of data to substantiate the relationship between the African American women's ability to practice preventative healthcare, reduce their risk to chronic disease, and improve their quality of life. A phenomenological approach was employed in this qualitative study to examine the factors that influence African American women's health promoting behaviors and lifestyle choices such as regular physical activity, good nutrition, routine health screenings, and other health-promoting behaviors. These factors included the women's perceived benefits and barriers to health promoting behaviors, self-efficacy, interpersonal and situational influences.

In order to gain insight into the factors associated with health promotion, two focus groups were used to examine the lived experiences of the women. Using body mass index (BMI) as a guide, the researcher was able to compare and contrast the health promoting behaviors of one group that had a BMI within the normal range verses the other group of women with a BMI in the obese range. A purposeful sample of eight African American women between the ages of 30 - 45 years were used.

The women in this study experienced continuous challenges implementing and sustaining health promotion activities to benefit their overall health over a long period of time. The factors that interfered were cultural traditions, competing demands on their time, and their own desire and ability to adhere to health promoting activities. With this information, the researcher made recommendations to implement future culturally appropriate interventions and health promotion programming to promote good health and lower the risk of chronic diseases in this population.

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## **Chapter 1: Introduction**

Our nation faces a crisis due to the burden of chronic disease, Centers for Disease Control and Prevention (CDC, 2014). Today, seven of the 10 leading causes of death in the United States are chronic diseases, and nearly 50% of Americans will live with at least one chronic disease. As of 2012, approximately 26% of adults in the US had multiple chronic conditions (MCC) (Ward, Schiller, & Goodman, 2014). The CDC states that chronic diseases and conditions, such as heart disease, stroke, cancer, diabetes, obesity, and arthritis, are among the most common, costly, and preventable of all health problems (2015). Treatment for people with chronic conditions accounts for more than 75% of the \$2 trillion spent annually on medical care in the United States (CDC, 2011). The Center for Disease Control and Prevention (CDC, 2014) declares that we are experiencing a national chronic disease crisis, and that the time to act is now.

According to the CDC (2014) African Americans experience a higher level of chronic diseases than any other ethnic group. Cardiovascular disease is the most common chronic disease in the African American community. The American Heart Association, (AHA) states that morbidity rates for African Americans are higher than Caucasians for stroke (AHA, 2013a), colon, breast, and prostate cancer. African American adults are twice as likely to have and die from a stroke as their White adult counterparts (National Stroke Association, 2016). Death rates for heart disease are 23% higher among African Americans than among Whites, and death rates for stroke are 31% higher (CDC, 2011). This is especially true for African American women who are 1.6 times more likely than their White female counterparts to have high blood pressure (U.S. Dept. of Health and

Human Services [USDHHS], 2015). In addition to cardiovascular disease according to USDHHS (2015), obesity plays a large role in the development of chronic diseases in African American women.

Obesity is a primary risk factor for chronic disease. Obesity increases the risk that persons may develop one or more serious medical conditions (CDC, 2009; The Obesity Society, 2010). The CDC (2016) stated that obesity is a term that means your weight is at least 20% more than what is considered a normal weight for your height (body mass index [BMI]  $>30 \text{ kg kg/m}^2$ ). The Obesity Society (2010) says that, obesity is usually accompanied by excessive adipose tissue (fat cells), which create plaque that can build up in the arteries and cause a blockage within the walls of the arteries. Over time, the blockage in the arteries can lead to heart attacks, heart failure, and stroke. Obesity is linked to chronic diseases because it is the common denominator and is a major risk factor in combination with high blood pressure, high cholesterol, cigarette smoking, poor diet, and physical inactivity that cause changes in the heart and blood vessels (The Obesity Society, 2010). According to the CDC (2012), obesity contributes to chronic diseases, such as heart disease, diabetes, and cholesterol. The CDC (2013) indicated that during 2009-2010, more than one-third of adults in the United States, or about 78 million people, were obese.

Data show that rates of obesity and related diseases are significantly higher among Blacks, Hispanics, Pacific Islanders, and Native Americans than among Whites and Asians (CDC, 2016). Compared with non-Hispanic Whites in the United States, obesity is 1.4 times more prevalent in the African American community (CDC, 2016).

Thus, obesity is now recognized as a complex disorder caused by the interplay of

multiple contributing factors. Further, ethnic, racial, and cultural factors have been found to influence obesity in the following ways: through genetic predisposition, by affecting socioeconomic level and geographic location, through traditional cultural attitudes and beliefs, and by influencing activity level and dietary behaviors. (Stanziano & Butler-Ajibade, 2011, p.1)

Statistics have shown that African American women are more likely to be more overweight, obese, and have a higher prevalence of physical inactivity than White and Hispanic women (Harley et al., 2014). In fact, African American women are 60% more likely to be obese than White women (CDC, 2016). This researcher goes on to say that, when African Americans do not maintain normal body weight and waist circumference, do not eat a healthy diet, and do not engage in regular physical activity, they are more susceptible to an increased risk of cardiovascular disease.

Cardiovascular disease is responsible for more deaths each year than cancer, chronic respiratory illnesses, accidents, and diabetes (CDC, 2016). Cardiovascular disease (CVD) is the leading cause of death in the United States of America (AHA, 2013a). Hypertension, coronary heart disease, heart failure, stroke, and congenital defects are the conditions included in the CVD group (Rosamond et al., 2007). Although African American adults are 40% more likely to have high blood pressure, they are less as likely than their non-Hispanic, White counterparts to have their blood pressure under control. According to the American Heart Association (2013a), diabetes, smoking, high blood pressure, high blood cholesterol, physical inactivity, obesity and a family history of heart disease are all greatly prevalent among African Americans and are major risk factors for heart disease and stroke.

The Center for Disease Control and Prevention (2015) states that, in the United States, it is estimated that over 40% of African American adults have hypertension. The CDC (2014), goes on to say that hypertension and its effects have an earlier onset, are more severe, and occur more frequently in African Americans than in Caucasians. The incidence rate of hypertension in African Americans in the United States is the highest in the world (CDC, 2014). African American women are affected by hypertension more than African American men, and the prevalence of hypertension in African American women is 3 times that of Caucasian women (CDC, 2014).

African Americans are disproportionately affected by several health related concerns (CDC, 2014; Mensah, Mokdad, Ford, Greenlund, & Croft, 2005). African Americans also have a mortality rate from cardiovascular disease that is more than 40% higher than Caucasians in the United States (CDC, 2012). The morbidity rate for African Americans is higher than Caucasians for stroke as well as colon, breast, and prostate cancer (CDC 2007). These, along with other health issues, are preventable diseases (AHA, 2013a; National Cancer Institute, 2004).

According to the American Heart Association (2009), obesity and cardiovascular disease plague the US. They say that what makes the phenomenon more concerning is that it is not equitable among the various communities throughout the country and the nation. In recent years, the nation has focused attention on disparities in health that exist between White Americans and racial and ethnic minorities (Smedley, Stith, & Nelson, 2003). Health disparities are described as inequitable mortality and morbidity rates for racial and ethnic minorities whom have higher rates and greater severity of disease than Whites for most, if not all, of the leading causes of morbidity and mortality in the US

(USDHHS, 2015). Culturally relevant health promotion and education activities and programs are one way of addressing health disparities and lowering chronic disease in this population (Smedley et al., 2003). Webb and Gonzalez (2006) imply that health promotion activities that are community-based and target the African American population should include public health education sessions in familiar community sites such as churches, community centers, hospitals, schools, and parks, where numerous individuals can be provided with preventative health and chronic disease risk education.

In addition, health care providers and health educators should have access to the latest research and data in order to empower them to have a positive impact on the health promotion and intervention strategies for African American women (Pender, Murdaugh, & Parsons, 2011). By gaining understanding about how a patient's sociocultural background can affect risk for obesity and obesity-related behaviors, clinicians can be better prepared to offer effective, culturally sensitive care (Barroso et al., 2010; Harrington, 2008; Stanziano & Butler-Ajibade, 2011).

This study identified factors that influence the health promotion behaviors in African American women. With this information, culturally appropriate interventions to promote good health and lower the risk of chronic diseases in this population can be enhanced. This qualitative study focused on an examination of culturally sensitive health promoting behaviors for African American women.

### **Problem Statement**

Effectively addressing the national chronic disease crisis is central to the future of health care in our nation, and a priority for policy makers and those who pay for public and private health insurance plans (CDC, 2011). Myers, Olson, Kerker, Thorpe, and

Farley (2010) stated that, because African American women have a disproportionate percentage of chronic illnesses compared to other ethnic groups, there is a need to improve their health status. The American Heart Association's (2009) study maintains that chronic diseases are preventable and this can be achieved through lifestyle modifications, such as, weight control, limitation of alcohol consumption, increased physical activity, increased fruit and vegetable consumption, reduced total fat and saturated fat intake, and smoking cessation. The adoption of healthy activities are critical and should be encouraged to prevent the risks and complications of chronic diseases (AHA, 2009).

One way to reverse the trend of African American women disproportionately affected by chronic diseases, would be to address and decrease health risk behaviors. Health risk behaviors are unhealthy behaviors you can change. Four of these health risk behaviors, which are lack of exercise or physical activity, poor nutrition, tobacco use, and drinking too much alcohol, cause much of the illness, suffering, and early death related to chronic diseases and conditions (CDC, 2012). Further research is needed to examine the factors that affect African American women and their motivators and barriers to health promoting behaviors. Pender et al. (2011) define health promotion as behavior motivated by a desire to increase well-being and promote change and growth in the human health potential. Health promotion behaviors are those activities motivated by the desire to protect or promote health (Pender et al., 2011). The agenda for health promotion is directed toward maximizing behaviors that move individuals and groups to a high-level of health and well-being. Primary prevention and health promotion have substantial benefits in decreasing morbidity and mortality. To accomplish the goal of improving



health in any given population requires an understanding of the motivational dynamics that influence health promotional behaviors with the populations of interest (Pender et al., 2011).

There has been some research on African American women (Bowen, Eaves, Vance, & Moneyham, 2015; Gross, Anderson, Busby, Frith, & Panco, 2013; Vidrine et al., 2013) and their knowledge level, attitudes, and perception about chronic diseases. However, more information is needed as it relates to their being motivated to practice health promoting behaviors and their willingness to address unhealthy behaviors. There is limited existing research on African American women's ability to practice preventative healthcare and their health promoting behavior for long-term health benefit.

This study examined the factors that affect African American women's health promoting behaviors and lifestyle choices, such as regular physical activity, good nutrition, routine health screenings, and other health-promoting behaviors. It is this researcher's goal to inform the future development of health promotion and prevention programs that are culturally sensitive and assist in the reduction in the chronic diseases and the high rate of morbidity and mortality in African American women.

### **Theoretical Rationale**

**Health belief model.** The theoretical rationale for this study has its roots in the health belief model (HBM). The HBM is a psychological health behavior change model developed to explain and predict health-related behaviors, particularly as it relates to participating in health services. The health belief model was developed in the 1950s by social psychologist Irwin M. Rosenstock (1974) at the U.S. Public Health Service to better understand the widespread failure of a screening program for tuberculosis.

Rosenstock (1974) stated that more recently, the model has been applied to understand patients' responses to symptoms of disease, compliance with medical regimens, lifestyles behaviors, and behaviors related to chronic diseases. There has been emerging evidence about the role of self-efficacy in decision making and behavior.

The HBM became one of the most widely recognized conceptual frameworks for creating healthy behaviors by focusing on positive behavior change at the individual level. The HBM is designed to assist in explaining and predicting preventative health behavior (Romano & Scott, 2014). The HBM provides a framework to examine an individual's health promoting behaviors. Romano and Scott (2014) stated that the focus is on the individuals' motivation and self-identifying perceived susceptibility, perceived seriousness, perceived benefits of taking action, barriers to taking action, and cues to action. The HBM can provide guidelines for program development, allowing planners to understand and address reasons for non-compliance. The HBM addresses four major components for compliance with recommended health actions:

1. Perceived barriers of recommended health
2. Perceived benefits of recommended health action
3. Perceived susceptibility of the disease
4. Perceived severity of the disease

Modifying factors that can affect behavior compliance include, media, health professionals, personal relationships, incentives, and self-efficacy of recommended health action. (Bandura, 2004).

One drawback of the health belief model is that it does not take into account other factors that influence health behaviors. For instance, habitual health-related behaviors

(e.g., smoking) may become relatively independent of conscious health-related processes. The HBM provided a basis for the development of future health promotion models and the examination of the factors that influence health behaviors.

**Pender's health promotion model.** The health promotion model (HPM) is relevant to this researcher's study of African American women because it provided a foundation to examine the background influences of this population as it relates to health promotion activities that can lead to a healthy lifestyle (Pender et al., 2011). In order to assist individuals in lowering their risk for chronic diseases and improving their health status, it is important to examine perceptions to evoke a positive health behavior change.

Nola Pender attended Michigan State University to earn her bachelor's and master's nursing degrees in 1964 and 1965, respectively. She earned her Ph.D. from Northwestern University in 1969. Pender began studying health-promoting behavior in the mid-1970s. Pender developed her health promotion model, (HPM) after seeing professionals intervening only after patients developed acute or chronic health problems. She believed that a patients' quality of life could be improved by the prevention of problems before they occurred, and health care dollars could be saved by the promotion of healthy lifestyles (Nursing Theory.org, 2016).

***Pender's health promotion model - theoretical roots.*** Pender used the expectancy value theory and the social cognitive theory as a basis to develop her health promotion model. Expectancy value theory promotes the idea that individuals engage in actions to achieve goals that are perceived as possible and that result in valued outcomes. The social cognitive theory examines the thoughts, behavior, and environmental interactions of

individuals. It also assesses how people alter their behavior and their thinking (Pender et al., 2011).

HPM is based on 8 categories:

1. Perceived benefits of action
2. Perceived barriers to action
3. Perceived self-efficacy
4. Activity-related affect
5. Interpersonal influences (family, peers, providers)
6. Situational influences (options, demand characteristics, aesthetics)
7. Commitment to plan of action
8. Immediate competing demands and preferences

***The purpose of Pender's health promotion model.*** Nola Pender's health promotion model was developed after the health belief model, to assist nurses in understanding the major determinants of health behaviors as a basis for behavioral counseling to promote healthy lifestyles (Pender et al., 2011). Pender describes her theory as, "the model that identifies background factors that influence health behavior. However, Pender et al. (2011) states that the central focus of the model are on eight beliefs that can be assessed by the nurse. Using the model and working collaboratively with the patient/client, it can assist them in changing behaviors to achieve a healthy lifestyle.

Using the HPM provided some insight as to why some African American women are not practicing preventative health care. Smedley et al. (2003), stated future analyses should consider the roots of attitudes in historic and contemporary, social and cultural forces, in and outside medical practice, that play a role in minority patients perceptions of

health institutions. Webb and Gonzalez (2006), indicated that personal perception is influenced by the whole range of intrapersonal factors affecting health behavior.

Behaviors models that fail to contain beliefs and perceptions of the target population pose a barrier to scientific advances.

### **Statement of Purpose**

Based on the urgency to address health care needs and disparities of African Americans, the purpose of this qualitative narrative research was to capture the lived experiences of African American women as it relates to the factors that are motivators and barriers to engage in and sustain preventative health care practices to reduce their risk of chronic diseases. There is a sparse amount of data to substantiate the relationship between the African American women's ability to practice preventative healthcare for long-term benefit in order to reduce their risk to chronic disease and improve their quality of life. Tucker (2014) agrees and stated that there is also limited data on what factors are motivators and barriers to practicing self-promoting health behaviors.

According to a statement made in the Westchester County Health Improvement Plan (Westchester County Department of Health, 2014b), in an effort to make New York the healthiest state, New York Department of Health adopted the Prevention Agenda 2013-2017, a 4-year plan, to identify New York's most urgent health concerns. The plan identified preventing chronic disease as one of its public health priorities. The Prevention Agenda calls for improving health status in the priority areas and reducing health disparities for racial, ethnic, disability, socioeconomic and other groups who experience them.

There has been some research on African American women and their knowledge level, attitudes, and perception about chronic diseases; however more information is needed as it relates to their being motivated to practice health promoting behaviors (Tucker, 2014). This study contributes to the knowledge and practice of health promotion in African American women. The researcher examined African-American women's lifestyles, their perceptions and beliefs regarding health, the amount of health education and knowledge they had, their access to good health care providers, access to physical activity opportunities, and the access to quality food sources or appropriate health care services and how these play a role in the execution of engaging in health-promoting behaviors. Identifying motivators that will encourage the motivational process among African American women is important, since a lack of motivation is a major cause for less than optimal engagement in health-promoting behaviors (Tucker, 2014).

Health care interventions can include, but are not limited to, health education, health screenings, physician's office visits, access to physical activities, and healthy nutrition sessions. Health interventions can be considered effective when an individual has lowered their risk for chronic diseases by attaining a healthy weight, healthy body fat levels, healthy blood pressure, and cholesterol levels.

### **Research Questions**

This study examined the factors that affect the health-promoting behaviors in African American women and answered the following questions:

1. Does culture impact African American women's willingness to adopt a healthy lifestyle?

2. What factors influence African American women's participation in preventative health practices (health promoting behaviors)?
3. What are the factors that influence African American women's motivation towards a healthy lifestyle?
4. What factors influence African American women's participation in preventative health programs?

### **Potential Significance of the Study**

There is a plethora of health policies and initiatives that have been developed or are in the development stages of addressing chronic disease reduction. The question is, what are the strategies for effectively implementing these policies in order to address the health care disparities in African American women? *Healthy People 2010*, the U.S. Department of Health and Human Services (USDHHS) 10-year agenda for health promotion and disease prevention in the 21<sup>st</sup> century, has two main goals: (a) to increase quality and years of healthy life and, (b) to eliminate health disparities (USDHHS, 2010). In order to reach the goals indicated by the USDHHS, research is needed to inform gaps in knowledge on MCC (Parekh, Goodman, Gordon, & Koh, 2011; USDDDS, 2010), including an effort to more frequently monitor MCC across the U.S. population by using data from national health survey such as the NHIS and other surveillance systems (Goodman, Posner, Huang, Parekh, & Koh, 2013). Such research can inform individuals leading prevention efforts and could improve the targeting of appropriate interventions.

In addition, the 2010 Affordable Care Act responds to the need for Americans to have access to recommended preventative healthcare services. The 10 titles of the law, especially Title IV, Prevention of Chronic Diseases and Improving Public Health, address

the national need for improved health promotion (Kohl, Dunn, Marcus, & Blair, 2010). The act strengthens the vital role of communities in providing health promotion opportunities and elevates disease prevention as a national priority.

This study is significant because it adds research and data to address health promotion initiatives and strategies by examining the factors that affect African American women's health promoting behaviors. These health promoting behaviors include physical activity, good nutrition, health screenings, and other positive lifestyles habits. The factors assist in identifying culturally sensitive, evidence-based training guidelines for health professionals that interact with African American women. Cultural sensitivity training is imperative to provide quality care to African American women (Barnes & Kimbo, 2012). Understanding their cultural beliefs and what motivates them to engage in health promoting activities would guide health professionals to provide culturally-based interventions.

To accomplish the goal of improving health in any given population requires an understanding of the motivational dynamics that influence health promotion behaviors with the population of interest (Pender et al., 2011). Knowing the cultural beliefs, attitudes, behaviors, and other factors that motivate African American women to engage in and sustain long-term health promotion behaviors as one means of chronic disease risk reduction can assist physicians, health care providers, and other stakeholders in developing specific and effective health promotion strategies among African American women.



## **Definitions of Terms**

To ensure clarity the following terms will appear in this study.

*African American or Black* — The term “black” or “African American” are used interchangeably to describe people who have origins in any Black racial groups of Africa.

*Body Mass Index (BMI)* — A measurement of weight in relation to height. (Schub, 2014)

*Body Fat Percentage* — The body composition that refers to the body weight that measures fat mass and lean body mass (included but not limited to muscles, bones, organs and internal fluids) (Yoke & Gladwin, 2007)

*Chronic Diseases* — Recurring health problems that are the leading causes of death and disability in the United States (Heart disease, stroke, high cholesterol, diabetes, arthritis and cancer) (CDC, 2014)

*Culture* — The beliefs, customs, arts of a particular society, group, place, or time. A particular society that has its own beliefs and ways of life.

*Health Promotion Program* — Health education program designed to encourage good health habits. (CDC, 2014)

*Physical Activity* — Any activity that gets your body moving for cardiovascular conditioning and muscular strengthening benefits. (Yoke & Gladwin, 2007)

*Obese* — Obesity in adulthood is defined as a body mass index.  $\geq 30$  (Schub, 2014)

*Overweight* — Overweight in adulthood is defined as a body mass index between 25 and 30. (Yoke & Gladwin, 2007)

*White* — “White” refers to a person having origins in any of the original people of Europe, the Middle East, or North Africa. It will be used interchangeably with Caucasian (U.S. Census Bureau, 2010).

## **Chapter Summary**

This chapter reviewed how African Americans have higher morbidity due to chronic diseases than any other ethnic group. It highlights the need for conducting further research on health-promoting behaviors as it relates to lowering the risk of chronic diseases such as obesity and cardiovascular disease in African American women. There is an emphasis on the fact that more research should be conducted on the role culture and health disparities play in African American women's health-promoting behaviors. Research plays an important role in finding effective solutions to address chronic diseases in African American women and lowering their risk toward chronic diseases. Chapter 2 provides a review of the relevant literature in the field of health promotion for African American women. The review starts with the history of African American culture as it relates to slavery, diet, and lifestyle. Thereafter a review on the literature related to health care disparities, health care interventions, prevention strategies, health promotion theories, and physical activity levels in African American women is discussed. Chapter 3 provides a review of the research methodology used for this study. This section includes: general perspective, research questions, research context, research participants, instruments used in data collection, and procedures for data collection and analysis. The findings of the study are presented in Chapter 4. This chapter includes: major findings, qualitative research methods, research questions, data analysis and a summary of the findings. Chapter 5 provides implications of the findings, the limitations of the study, and the researcher's recommendations for practice and future studies.

## **Chapter 2: Review of Literature**

### **Introduction and Purpose**

A literature review was undertaken to explore the existing research related to the history and factors affecting African American women's health promoting behavior. The review of literature examined six areas influencing the barriers and motivators of health-promoting behavior among African American women. The review commences with literature related to the history of African American's diet and lifestyle, beginning with slavery within the United States, and the link between their history and the cultural patterns demonstrated now. A definition and history of health promotion theories is outlined. This includes the research conducted by Nola Pender and similar health promotion and health behavior theories over the past three decades. Research related to health care disparities affecting African American women was evaluated. Literature related to the physical activity levels of African American women was also examined. Lastly, there is a section that discusses health care intervention, prevention strategies, and health promotion for African American women.

### **African American Slave Narrative**

In order to obtain a better understanding of the factors that affect African American women's health behavior, it is important to explore the evolution of African American's experience with regard to their health care. According to Bronson and Nuriddin (2014), the first enslaved Africans were brought to Virginia in 1617 and this continued until 1865. During this time, the first recognizable signs of the modern formal

health care system became apparent. History and research tell us that slaves suffered from poor health more than Whites and received unequal and inadequate healthcare (Covey, 2007). Both free and enslaved African Americans were discriminated against. They were not afforded the same access to quality healthcare. In addition, the decline in the enslaved Africans health can be attributed to many factors including eating a healthy diet in their homeland, based on fresh fruits, vegetables, and beans, as compared to eating the scraps, leftovers, and grain provided by their slave master. Insufficient diets meant the proper nutrients were not received, leaving them susceptible to diseases of nutritional deficiencies (Covey, 2007).

The brutal and deplorable conditions of slavery led to poor health, injuries (inflicted and accidental), and untimely death for millions of Africans. Slaves were often expected to work regardless of a health condition or illness (Bronson & Nuriddin, 2014). Former slaves described their living conditions as poor, including improper sanitation, poor ventilation, damp floors, and cramped quarters. These situations caused increased stress in their life, which affected their health and well-being. These conditions, along with stressful working environments, resulted in epidemics of typhoid, typhus, measles, mumps, and chicken pox among slaves (Savtt, 1978).

The social control of human labor during slavery made it difficult if not nearly impossible for enslaved Africans in America to lead both healthy and fulfilling lives. Those who were enslaved were forced to work oftentimes, under conditions that did not allow them to take care of their total health and well-being (Bronson & Nuriddin, 2014). For the vast majority of the period of slavery in America, medicine was quite primitive

and knowledge of specific diseases and illnesses was severely underdeveloped (Washington, 2006).

“After emancipation and the Civil War, poor African American health continued into the next century due to poverty, poor living conditions, inadequate sanitation and housing, and persistent racism and racial discrimination” (Bronson & Nuriddin, 2014, p. 713). There was little or no recourse due to institutional discrimination and prevailing racial stereotypes which still considered African Americans as inferior to their White counterparts (Bronson & Nuriddin, 2014). The enslavement of African Americans lasted for 246 years and ended with the emancipation proclamation. This set the foundation for many African Americans to mistrust the medical community due to the perceived unequal and inadequate medical treatment they encountered during slavery (Bronson & Nuriddin, 2014).

Based on the narratives of many African Americans who were interviewed, Bronson and Nuriddin (2014) shared that the former slaves participated in an array of health practices including the elaborate use of herbs, roots, and potent elixirs to prevent and treat illnesses. Sometimes, these practices were with or without the consent of their owners. Some slaves who did not have access to doctors were often allowed to get treatment from “granny doctors.” A granny doctor was common name used among the slaves when they referred to an older woman that medically treated the slaves. The folk remedies used by the slaves to prevent and treat illnesses were preferred to doctor administered medicines and there was an inherent mistrust of doctors’ treatments and medications that were prescribed (Bronson & Nuriddin, 2014; Hammond, 2010.). The inherent lack of value placed on the lives of enslaved African Americans and their

vulnerability meant that their bodies would be utilized most often for medical experimentation, training, and education which became a widespread practice in the United States (Fett, 2002; Kennedy, Mathis, & Woods, 2007; Washington, 2006). Kennedy et al. (2007) reported that in surveys of African Americans, they have reported that they feared they would be used as guinea pigs for medical research. This same survey also found that African Americans were more likely than Whites not to trust that their doctors would fully explain the significance of their participation in clinical research or other studies. For example, this was evidenced in the now infamous Tuskegee syphilis study. As indicated by Kennedy (2007), the United States Public Health Service conducted a study on African American men from 1932 to 1972. The study involved tracking the progression of the disease syphilis by not administering treatment to approximately about 400 African American men. Although penicillin became the standard cure, these men did not receive the treatment. Many people have considered this study to be a classic case of governmental racism against African Americans and is one major reason why so many African Americans distrust the health care system (Kennedy, 2007).

#### **Historical cultural patterns that influence African American women's health.**

In addition to the historical, structural influences on health and medical care, public health researchers in the US overwhelmingly argue that an agenda to eliminate health disparities must also account for the way that culture affects health behaviors and attitudes (Odoms-Young, Zenk, & Mason, 2009). Kreuter and McClure (2004) who studied the health disparities in the African American community, defined culture as, "Culture is learned, shared, transmitted inter-generationally, and reflected in a group's,

beliefs, norms of communication, familial roles, and other social regularities” (p. 237).

The cultural practices of many African Americans began in Africa, but were impacted upon once their ancestors arrived in the United States. One cultural practice that saw a significant impact was food and eating practices. Researchers have found that some African Americans feel their food practices have been shaped by the impact of slavery on the ancestor’s diet (James, 2004). James (2004) described the impact in the following manner:

Slaves who were brought to the USA combined their West African cooking method with British, Spanish, and Native American techniques with whatever foods were available to produce a distinctive African America cuisine called ‘soul food’... Soul food emphasizes fried, roasted, and boiled food dishes using primarily chicken, pork, pork fat, organ meats, sweet potatoes, corn, and green leafy vegetables. (p. 351)

Examples of soul food dishes include fried chicken, barbecued meats such as pork, beef, and chicken, collard greens, macaroni and cheese, chitterlings, corn bread, biscuits, cakes, and pies (James, 2004). Many African Americans refer to these dishes as soul food because, as James (2004) indicated, “the foods of the ancestors nourish the body, nurture the spirit, and comfort the soul” (p. 352). To many African Americans, these dishes are traditional and an important part of their culture and heritage. Veering away from them would mean turning their back on their culture. Unfortunately, the way these foods are traditionally prepared and consumed is not healthy because of the high fat and salt content (James, 2004).

## **Effects of Health Disparities and Culture on African American Women's Health**

Health disparities are differences in health outcomes between groups that reflect social inequalities (Myers et al., 2010). For African American women, this is a national issue. Racial and ethnic disparities in health care are known to reflect access to care and other issues that arise from differing socioeconomic conditions. There is, however, increasing evidence that even after each difference is accounted for, race and ethnicity remain significant predictors of the quality of the health care received (Smedley et al., 2003). Experts agree that health disparities result in avoidable illnesses and deaths in one group of people versus another, and arise from a variety of causes, not all of which are fully understood (Myers et al., 2010). The United States is known for its ability to provide the most advanced health care that medical science can offer. Although there has been notable progress in medical advancement, persistent disparities remain in the burden of illness and mortality experienced by African Americans (AHA, 2014; CDC, 2013).

The U.S. Department of Health and Human Services (2015) asserts that, African Americans are disproportionately overrepresented in women's reproductive health disparities. African American women are less likely to have access to reproductive health care, including medically appropriate contraceptives, annual gynecological exams, and prenatal care. In addition, women of racial and ethnic minorities are less likely than White women to receive a Pap test, which can prevent invasive cervical cancer by detecting precancerous changes in the cervix.

In contrast, Myers et al. (2011), stated that in New York City, cervical cancer screening rates for Black women was 81% compared to 77% of White women between the years 2009 to 2011. In 2009, White women ages 40 and older were less likely to be



screened for breast cancer (75%) than Black women (81%). In Westchester County, New York the Westchester County Department of Health, (2014) reported that compared to White women (10.8%), Black women (23.8%) were more likely to receive family planning services in a 12 month period from 2009-2010.

According to the Westchester County Health Improvement plan (Westchester County Department of Health, 2014b), it was stated that in order to prevent chronic disease there must be a reduction in racial disparities by decreasing the percentage of Blacks and Hispanics dying prematurely from heart related diseases. Between the years 2008 and 2010, the percentage of premature deaths due to heart disease was 8.6% for non-Hispanic White residents and 22.4% for non-Hispanic Black residents. The average age at death was 79.9 for non-Hispanic Whites and 69.1 for non-Hispanic Blacks during the years 2008 to 2010.

Similarly, researchers (Myers et al., 2010; Tucker, Smith, Arthur, & Wall, 2014; White, 2011) agree with the need to reduce racial disparities to help prevent chronic disease. Disparities in health care have been on the national agenda since the 1990s. Given the history in America of racial prejudice, it wasn't a surprise that Blacks were especially subject to inferior treatment (White, 2011). Compared to Whites, African Americans have lower rates of effective health interventions. For example, Myers et al. (2011) reported that hypertension rates have decreased for both Whites and Blacks, as has the Black/White gap. Despite these gains, hypertension death rates among Black New Yorkers remain almost 4 times higher than among White New Yorkers (35 vs. 9 per 100,000 adults).

Smedley et al. (2003) cited ineffective health care intervention strategies exist due to failures in the health care system to properly address the healthcare needs of African American women. Few intervention studies have demonstrated sustained effectiveness in preventing or controlling overweight and obesity. Studies have mainly involved either highly selected, relatively affluent Whites engaged in costly, individually targeted educational or behavioral interventions. Studies have shown that interventions have failed because of an environment that promotes physical inactivity and excessive food consumption. Although many studies support that health disparities exist, there has been some criticism in the research literature (Smedley et al., 2003). Clarification regarding the overall value of addressing health disparities first with African American women in an effort to have better health care outcomes is needed.

**Health disparities and women's failure to practice preventative health care.**

Health disparities do not only exist because of some failures of the health care system; women also have the responsibility to practice preventative healthcare. Smedley et al. (2003) affirmed that women report various reasons for delaying care, including cost, lack of insurance, and competing family work responsibilities. Early detection is critical for effective treatment and management of several illnesses that affect women. Women of all races fall short of maximizing use of available screening tests and racial and ethnic differences are apparent in this area as well.

Although African American women are given the tools and resources to practice good preventative health care, they may not continue to do so. Some women participate in health promotion programs, however, when the health promotion programs conclude, the participants may not continue to implement what they learned, therefore the

intervention did not realize sustained effectiveness in preventing or controlling obesity (Smedley et al., 2003).

**Shortage of primary care physicians with the same cultural background.**

According to White (2011), there is a shortage of primary care physicians who have the same cultural background of African Americans and this could be a contributing factor to ineffective health care interventions. The experts (Nelson & Shavitt, 2002; Westchester County Department of Health, 2014a; White, 2011) agree that, because of this difference, the physicians may not be culturally sensitive to the health care needs of the individuals they serve. Myers et al. (2011) reported that, in New York State, 70% of active patient care physicians in New York were non-Hispanic Whites. Underrepresented minorities (URMs) (Blacks/African American, Hispanic/Latinos, and American Indians) made up 10% of the physician workforce in 2006. At the same time, URMs made up approximately 35% of New York's population. In studies conducted by Smedley et al. (2003) the participants indicated that it is easier to develop a rapport or discuss treatment options with healthcare providers of their own race who already understand their language and cultural idiosyncrasies.

**Health care interventions and culturally sensitive health promotion**

**programs.** In spite of the research and the education of some, African American women are not practicing preventative care (CDC, 2008). Medical and health professionals are using health promotion programming as a tool to address the effects health disparities and culture have on African American women's health care (Smedley et al., 2003). The high prevalence of chronic diseases in African American women, and their lack of participation in traditional risk reduction programs, underscores the need for accessible

health promotion and disease prevention programs that take into consideration the cultural perspective of the African American woman (Barnes & Kimbo, 2012).

There are numerous factors that affect health care intervention strategies that lead to good health care outcomes for African American women as it relates to chronic diseases such as heart disease, stroke and diabetes. (Joseph et al., 2013; Parra-Medina, et al., 2011; Ray, 2013). One such intervention would be culturally sensitive health promotion programs geared toward the elimination of chronic diseases. Health promotion has been described by the World Health Organization (WHO) (2016) as a process of enabling people to increase control over, and to improve their health. It moves beyond individual behavior towards a variety of social and environmental inventions. Pender et al. (2011) declared that health promotion has become integral to our efforts to improve public health.

Goals of health promotion include the primary and secondary prevention of disease and health-compromising conditions. Health promotion programs offer opportunities for African American women to engage in healthy activities that will assist them in lowering their risk for chronic diseases. These health promotion programs emphasize prevention. Prevention reduces the chronic disease risk (CDC, 2014). Although chronic diseases are among the most common and costly of all health problems, they are also among the most preventable. Prevention encompasses health promotion activities that encourage healthy living and limit the initial onset of chronic diseases. Early detection is important; therefore, health screening of at-risk populations is critical. According to the CDC (2008), an adult with healthy blood pressure and healthy blood cholesterol levels has a greatly reduced risk of cardiovascular disease. Lifestyle changes

in diet and exercise, including a 5%-7% maintained weight loss and at least 150 minutes per week in physical activity, can prevent or delay the onset of type 2 diabetes for Americans at high risk for the disease.

A relatively new idea is engaging African American women in health promoting programs via an Internet-delivered physical activity program. Internet-based physical activity interventions represent a potential high-reach, low-cost method to promote physical activity (Marcus et al., 2006). A pilot study conducted by Joseph et al. (2013) tested a 6-month theory-based (social cognitive theory - SCT) culturally-relevant website intervention to promote physical activity (PA) among African American female college students. A single group pre-posttest design was used. PA and associated SCT constructs (outcome expectations, enjoyment, self-regulation, and social support) were assessed at baseline, 3 months, and 6 months. The results indicated that the sample was comprised of mostly obese young adults. Fifty percent of the sample completed all assessments. Significant increases from baseline to 6 months were found in self-regulation for PA and social support for PA from friends. Changes in the SCT variables were not significantly associated with changes in PA; however, this may have been due to the small sample size. Future studies with larger samples and more aggressive retention strategies are needed to further explore the applicability of web-based approaches to promote PA in this at-risk population.

Banks-Wallace and Conn (2002) reviewed the intervention research literature testing strategies to increase activity among African American women. Eighteen studies with 1,623 subjects were reviewed. Diverse interventions, settings, and measures were reported. Common methodological weaknesses included lack of randomization of

subjects, single-group design, instruments without documented validity and reliability, significant attrition, and questionable timeliness of the outcome variable measurement. Strategies to design and deliver culturally appropriate interventions were reviewed. Suggestions for future research, such as examining intergroup differences and communal resources, were provided. The number of studies designed to promote activity among African American women is growing, but study design and measurement limitation combined with inadequate replication of intervention components prevent the existing evidence from forming a solid base for practice.

In Davis-Carroll's (2011) study, she analyzed the health messages that focus on high mortality and morbidity rates, yet have not reduced health disparities, but have instead reduced Black women's bodies to carriers of disease. Davis-Carroll (2011) found that media messages directed toward African American women had content that emphasized negative outcomes or sexual stereotypes. The researcher recommended improving health outcomes of African American women by improving the health messages that are delivered in the media.

**Culturally sensitive health promotion and the church setting.** The church setting is one environment where health promotion programs have been implemented due to the nature of the captive group audience and the possibility of success resulting from the social support systems. Many of these health promotion programs were implemented with church members because it is a familiar environment where there is a certain level of trust of the church leaders and members. The church setting is an environment where there may be preexisting communication exchanges and support systems (Lumpkins et al., 2013).

The African American Church today has evolved into a multi-faceted organization, serving the needs for members but also the surrounding communities through various types of partnerships that involve educational, social welfare, social justice and also health programs. The church's role in the community makes it a natural partner in addressing health disparities among African Americans. (Lumpkins et al., 2011, p.1095)

Church-based health promotion interventions (CBHP) and church-based health promotion programs (CBHPP) have shown to significantly impact several health behaviors among African Americans (Campbell, Resnicow, Carr, Wang, & Williams, 2007; Peterson, Atwood, & Yates, 2002).

The effectiveness of a pastor's communication can be instrumental in the delivery of important health promotion messages. This was exemplified in the American Heart Association's (AHA) *Search Your Heart* Program, (2004) a faith-based program for heart health and stroke prevention. This program was geared toward educating people and reducing cardiovascular disease and stroke risk factors in minority communities using the American Heart Association-Search Your Heart Kit. This program's primary focus was on health education and did not emphasize the motivators and barriers to engaging in and sustaining physical activity as one health promoting behavior. Since the early 2000s when the *Search Your Heart* program was implemented, the AHA has partnered with numerous churches to encourage members to participate in the "Power to End Stroke" campaign (American Stroke Association, 2009). This program emphasized the education of recognizing stroke signs and symptoms.

Another program was the National Cancer Institute (2004) Body & Soul program. The Body & Soul: A Celebration of Healthy Living program emphasized the increased consumption of fruits and vegetables among African American church members to help reduce their risk of cancer and other diseases. The objectives of the program were to (a) increase church members understanding of National Cancer Institute nutrition guidelines, (b) increase participants' awareness, knowledge, and self-efficacy related to increased fruit and vegetable consumption, (c) to change social norms related to the importance and benefits of eating fruits and vegetables, and, (d) increase the availability of fruits and vegetables in the environment of church members (National Cancer Institute, 2004). This program was developed out of efficacy intervention studies (between 2004 and 2006) with the African American community in mind. At the 6 month follow-up, the intervention participants showed a significant increase in fruit and vegetable intake, a decrease in fat intake, and a greater motivation to eat fruits and vegetables.

Participants learned about the health program in multiple ways. The majority (89%) of the participants self-reported that they heard messages from the pulpit in support of the project (Campbell & Quintiliani, 2006); 75% of the participants also learned of the program by attending the church kick off and 90% indicated they learned about the program from educational materials such as a video and church cookbook. This study showed that the participants' successes were linked to interventions on multiple levels such as health education materials, volunteer assistants, and support from the pastor. The pastor's health messages and spiritual messages created influential communication that impacted health promoting behaviors among church members.



Project TEACH was a church-based program to impact obesity in African American women participants between the ages of 20 and 65. The individuals self-reported being in reasonably good health, overweight, having a BMI body mass index great than 27.5, and having no debilitating injuries or illnesses. Cooper, King, and Sarpong (2015) researched this program that was implemented over 12 weeks within the church, in hopes of establishing new health habits. Overall, at the completion of the intervention, the mean changes in weight, BMI calculation, and circumference measurement were all statistically significant.

The decrease in all measurements suggested that Project TEACH was successful. Although the project results showed success, there were limitations to the program. The 12 weeks required a level of commitment that was not possible for all participants. Because the program was free, it may have encouraged participants who were less invested and not strongly committed to making changes, decreasing the likelihood of consistency and involvement. The program was also held during the holiday season, October through January. This may have also affected consistent attendance. Although it seemed that this did not negatively impact the group, perhaps the positive results could have been greater during another time of the year. The age range of invited participants of 20 to 65 years also frustrated the excluded individuals who wished to participate. Project TEACH has shown that even with a small sample, educating and promoting health among African American community will provide a knowledge base which will potentially help to reduce monumentally significant health disparities.

In a study, Sessoms and Payne (2013) examined a group of African Americans in September 2006 who attended Mississippi Boulevard Christian Church in Memphis,

Tenn. The goal was to increase the women's physical activity and endurance by starting a running program that would lead to running races. A group of six church members grew to over 150 church members known as "Sisters in Motion Memphis." The majority of the members attended approximately four to five races per year. This study showed that this group of women went from depending on their individual efforts to improve their physical activity to community health improvement collectively. As a group, "Sisters in Motion Memphis" were able to increase their physical activity and endurance.

Seale et al. (2013) studied 20 African American church members who previously participated in a church-based group weight loss program. The members were recruited to participate in focus groups. A qualitative inquiry focused on the role of faith in maintaining healthy lifestyle behaviors, such as healthy eating and regular physical activity. This study resulted in the identification of seven conceptual domains that the participants thought were important aspects of a faith-based weight-maintenance program. They included (a) accountability for change targets, (b) programmatic tools, (c) group benefits and support, (d) keys to successful behavior change, (e) keys to church and programmatic level success, (f) addressing barriers, and (g) faith. Eleven recommended components for a faith-based weight maintenance program were developed. The top four included scriptures and prayers which were; "walk of faith," healthy diet, exercise, and focusing on God. The results suggest that integrating faith themes into a weight loss maintenance program may increase its long-term impact on participants' health behavior change.

Culturally sensitive health promotion programs that are delivered in a church-supported setting with an identified health promotion intervention specialist have yielded

the best results. Numerous studies indicated that there is a need to have these health promotion programs for the long-term in order to have an impact on reducing the risk factors associated with chronic diseases. The development of effective methods to implement and maintain population-based behavioral change in a variety of cultural settings is vital to the long-term health of this nation (Ogden et al., 2010; USDHHS 2010).

**Health coaching and community health workers.** Many studies realized success in their programs where the curriculum was enhanced by the use of another person to which the African American women was accountable. In some instances, their accountability partner was in the form of a health coach or community health worker, as in the Whitt-Glover, Goldmon, Karanja, Heil, and Gizlice (2012) study. In the church setting, health promotion programs also saw success when members of the clergy were actively involved. L.A.D.I.E.S. included members of the clergy and the local faith-based community in the development of content for the faith-based curriculum, which was delivered from a faith perspective. Scriptures and biblical messages were incorporated within the program content (Whitt-Glover et al., 2012). L.A.D.I.E.S. capitalized on elements of previous studies that were shown to be successful and improved upon elements of previous studies that were shown to be unsuccessful. Similar to several other churches that experienced success, L.A.D.I.E.S. utilized health intervention leaders called community health workers (CHW). When the community health model was used, members of the community served as intervention leaders and were partnered with a church liaison to assist with delivery on the intervention content (Whitt-Glover et al., 2012).

Whitt-Glover et al. (2012) compared three strategies for increasing physical activity among African American women using a cluster randomized controlled trial. Underactive adult women from 30 churches were recruited. Churches were randomized to receive a faith-based intervention, a non-faith based intervention, or an information only control group. Intervention groups met 25 times in group sessions with other women from their church over a 10-month period. Control group participants received standard educational material promoting PA. All participants were followed for an additional 12 months to assess PA maintenance. The data was collected at baseline, 10 and 22 months. This study revealed that faith-based physical activity interventions are promising, but that improvements in study design, measurement, and theoretical framework are needed.

**Motivated by medical concerns.** Some African American women may be motivated to eat healthy due to medical concerns given the focus of the media on the links between obesity and chronic conditions, and the importance of a healthy diet to overcome obesity (Tucker et al., 2014). In contrast, the African American population has been found to have a lower prevalence of body dissatisfaction, despite having a higher rate of overweight and obesity, when compared to other racial/ethnic groups in the United States (Flegal, Carroll, Kit, & Ogden, 2012). Based on their study, Tucker et al. (2014) stated that body mass index (BMI) was not a significant direct predictor of motivation to eat healthy on its own; however, BMI in conjunction with the knowledge of the reported number of chronic health conditions significantly motivated individuals to eat healthy. This may be due to the lack of connection between African Americans perception on what constitutes a healthy weight and the current medical definition of overweight/obese. “In other words, if overweight/obese Blacks do not perceive their weights as problematic,

then they may be less likely to be motivated to engage in health promoting behaviors such as healthy eating” (Tucker et al., 2014, p. 107).

**Failure to practice preventative health due to socio-economic reasons.** Failure to practice preventative health care is due to socio-economic reasons in some instances. Smedley et al. (2003) cited that racial and ethnic minority Americans are significantly less likely than White Americans to possess health insurance. This is especially true among the working poor and individuals who have no employment based insurance.

African Americans are less likely to possess private or employment based health insurance relative to White Americans, and are more likely to be covered via Medicaid or other publicly funded insurance. Lack of insurance poses the most significant barrier to care. (Smedley et al., 2003, p. 84)

Some women may want to go to the doctor, but they cannot because they do not have health insurance. “The probability of being without health insurance coverage for African Americans is 22.8 percent, compared with 17.5 percent in the general population” (Smedley et al., 2003, p.85).

**Failure to practice preventative health due to a lack of education.** Failure to practice preventative health care can be due to lack of education. Studies show that early detection of breast and cervical cancer saves lives (Myers et al., 2011). The American Cancer Society (2016) cited that, breast cancer is the second leading cause of cancer death among African American women. The Center for Disease Control and Prevention (2014) reported that mammography and Pap tests are under used by women who have less than a high school education, are older, live below the poverty level, or are members of certain racial and ethnic minority groups.

**Financial ramifications.** Brownson et al. (2000) explained that there are financial ramifications when chronic diseases are not addressed. Society pays a high opportunity cost when interventions that yield the highest health return on investment are not implemented. Smedley et al. (2003) concurred from an economic standpoint, the costs of inadequate care may have significant implication for overall healthcare expenditures. In practice, intervention decisions are often based on perceived short-term opportunities, lacking systematic planning and review of the best evidence regarding effective approaches. Although strategic health care interventions are implemented, decisions made within the health system can affect the type of care an individual woman can receive.

**Culture specific and community/population based interventions.** Ethnically inclusive studies reviewed placed greater emphasis on involving communities and building coalitions from study inception, targeting captive audiences, mobilizing social networks, and tailoring culturally specific messages and messengers were all important elements. One such health promotion project cited by Parra-Medina (2011), was the Heart Healthy and Ethnically Relevant Lifestyle (HHER) trial (2005-2008). Low-income African American women aged 35 and older who were patients of various South Carolina community health care centers were randomly assigned into one of two groups. The purpose of the study was to assess the effectiveness of a culturally appropriate, theory-based intervention delivered in primary health care settings to reduce dietary fat and increase moderate-to-vigorous physical activity among African American women. Participants received either comprehensive or standard care interventions. The

interventions were based on integrating the transtheoretical model and social cognitive theory. The programs were available to African American women free of charge.

The researchers conducted the baseline, 6-month, and 12-month assessment in the participant's home to minimize transportation barriers. Of the 553 targeted participants, 465 completed the telephone survey. The comprehensive care participants were more likely than were standard care participants to increase their leisure time activity and decrease their dietary fat intake. As reported by Parra-Medina (2011), the HHER study was conducted to realize the benefit of having population-based health promotion programs to engage communities of color in healthy eating and active living in order to reduce the participants' cardiovascular disease risk.

Tucker (2014) agreed with involving communities and tailoring cultural specific programs. She used a combined individual and community-based/participatory health empowerment research approach. Tucker's widely used and published health self-empowerment theory and patient-centered, culturally sensitive health care model supported her research. In the Bronx, New York, the implementation of her evidence-based Health-Smart Behavior (HSB) Program was based on the health self-empowerment theory. There were 674 adults who were a part of the program; 314 were Hispanic/Latino, 207 were non-Hispanic Black, and 153 were non-Hispanic White. The program participants saw a decrease in their blood pressure, a decrease in their weight and they increased their physical activity. The study also showed that participants were also more responsible for their physical health. A review of the Health Smart Behavior study (Tucker, 2014) and the WISEWOMAN (Yancey et al., 2004) studies have shown

that population-based interventions are suitable in addressing socio-economic and physical environmental concerns.

**Evidence based public health interventions.** Brownson et al. (2000) has studied the concept of evidence based public health (EBPH). Key components of EBPH include making decisions on the basis of the best available scientific evidence, using data and information systems systematically, applying program-planning frameworks, engaging the community in decision making, conducting sound evaluations, and disseminating what is learned. Although collecting evidence is important for analyzing the effectiveness of programs, it should also be understood that evidence is not perfect. In addition, practitioners should seek the best evidence available, not the best evidence possible. The Westchester County Department of Health (2014c) purported that evidence-based and best practice interventions can be implemented within the public health sector to improve health status and reduce health care disparities that exist in Blacks and Hispanics in Westchester County, New York. Brownson et al. (2000) cited that barriers to implementing EBPH include the political environment and deficits in relevant and timely research, information systems, resources, leadership, and the required competencies.

### **Definition and History of Health Belief Model and Health Promotion Theories**

**Introduction.** Since the development of the health belief model by social psychologist Irwin M. Rosenstock in the 1950s, subsequent health behavior change models were developed to explain and predict health-related behaviors. In the 1970s as these models evolved, they have been applied to understand an individual's responses to lifestyle behaviors and behaviors related to chronic diseases. The health belief model (HBM) became one of the most widely used and recognized theoretical frameworks used



to examine health behaviors that focus on positive changes with individuals. The HBM provides a framework to examine an individual's health promoting behaviors. This includes the focus on the individuals' motivation and self-identification of the perceived susceptibility to illness, the perceived seriousness of the illness, perceived benefits of taking action, barriers to taking action, and cues to action. The HBM is designed to assist in explaining and predicting preventative health behavior (Romano & Scott, 2014). Romano and Scott (2014), and other researchers stated that the HBM can provide guidelines for program development allowing planners to understand and address reasons for non-compliance.

**Criticism of the health belief model.** While the health belief model is the leading model regarding health behavior, there has been some criticism as it relates to a proactive approach to examining health promoting behavior. For example, it is important to look at other factors that influence health behavior such as habitual smoking.

**Pender's influence.** Nola Pender took her nursing background to study the health-promoting behaviors in her patients and the patients of her colleagues in the mid-1970s. Her health promotion model is a modification of the health belief model in that it addressed preventative health (Pender et al., 2011). She developed her health promotion model as a proactive measure to address the improvement of acute and chronic health conditions. The majority of the literature related to health promotion demonstrates that Pender used the expectancy value theory and the social cognitive theory in the development of her health promotion model. The expectancy value theory promotes the concept that individuals engage in actions to achieve goals that are perceived as possible and that result in valued outcomes. The social cognitive theory examines the thoughts,

behavior, and environmental interactions of individuals. It also assesses how people alter their behavior and their thinking (Pender et al., 2011). This enhanced theory can help researchers and health care professionals understand the major determinants of health behaviors as a basis to develop behavioral strategies to promote healthy lifestyles.

Wood (2008) examined the information resources, level of knowledge on hypertension, and health promoting behaviors (diet and exercise) of young African American women in order to determine where there was a relationship between their knowledge level and health promoting behaviors. The women were 18 to 30 years old. Data was collected using a demographic questionnaire, a high blood pressure IQ Quiz, and the Health Promoting Lifestyle Profile II. Participants reported they received the majority of their information from their doctors, daily television, and schools. Participants scored an average of 70% on the high blood pressure quiz. No significant positive correlation was detected between knowledge level and health promoting behaviors. The implication from this study was that further research is needed to determine the variables affecting hypertension knowledge and health promoting behaviors.

Tucker (2014) researched body mass index (BMI) as a predictor of motivation to eat healthier due to medical concerns and to determine whether this relationship is mediated by the reported number of chronic health conditions. A cross-sectional sample of 207 Black adults in the Bronx, New York, completed questionnaires using the Motivators of and Barriers to Health-Smart Behaviors Inventory and a Demographic and Health Information Data questionnaire at a variety of community-based sites in this city, including hospitals, laundromats, and street locations. The results revealed that a

mediation model was tested using Preacher and Hayes' simple mediation macro for SPSS. Although the effects of chronic disease conditions on the body and having a high BMI were reported to the participants, there was not a significant motivation to eat healthier. In conclusion, this study found that interventions developed by health promotion and health disparities researchers to increase motivation to eat healthy should consider increasing awareness and knowledge of the health risks associated with obesity and related chronic health conditions. They also recommended promoting routine health care visits to facilitate early diagnoses of chronic health conditions as integral intervention components.

Murrock and Gary (2008) conducted a secondary analysis that tested the reliability and validity of the Self-Efficacy of Exercise (SEE) and the Outcome Expectations for Exercise (OEE) scales in 126 communal dwelling, middle aged African American women from two Midwest urban African American Baptist churches. Data on SEE and OEE were collected from a two-group longitudinal study that examined the effects a of culturally-specific dance intervention on lifestyle physical activity, functional capacity, body fat, and body mass index (BMI) at baseline, 8 weeks, and 18 weeks. The word "dance" replaced exercise as part of the study to see if it would make a difference to the women. The study found that the woman were more prone to participate in a dance program versus an exercise program. Social cognitive theory postulates self-efficacy is behavior, age, gender, and culture specific. Psychometric analysis revealed that the SEE and OEE were reliable measures of self-efficacy for cultural dance in community dwelling, middle-aged African American women. The SEE and OEE help to explain how and why culturally relevant physical activity programs are successful in African

American women. Murrock and Gary (2014) claimed that the SEE and the OEE instruments are useful to help facilitate, develop, and evaluate culturally relevant physical activity programs to help reduce the incidences and prevalence of chronic disease that disproportionately affect African American women. This study added to the body of knowledge because there are no reported mean inter-item correlations for either scale in any population.

In the study by McGuire and Anderson (2010), their goal was to examine the concept of perceived barriers in health promotion for risk factor reduction, and to describe a perceived barriers and lifestyle risk factor modification model which could potentially be incorporated in existing frameworks for diabetes education to enhance lifestyle risk factor education in women with type 2 diabetes. Nola Pender's health promotion model was used to promote high level personal health and well-being. This study revealed that current approaches to risk factor reduction in type 2 diabetes could be enhanced by assessment and goal setting to reduce an individual's perceived barriers to lifestyle behavior change.

### **Physical Activity Levels of African American Women**

Engaging in regular physical activity not only decreases the risk of heart disease, hypertension, obesity, and diabetes, but it also helps to increase the metabolism and burns calories more efficiently. Physical activity is beneficial to the musculoskeletal system, increases energy, and allows individuals to cope with stress (Buchholz & Artinnian, 2009).

**Factors that affect the engagement and maintenance of African American women in physical activities.** Harley and Buckworth (2009) stated that regular physical

activity is linked to a reduced risk of obesity and chronic disease. African American women bear a disproportionate burden from these conditions and many do not get the recommended amount of physical activity (CDC, 2008). According to the CDC (2008) the recommended amount of physical activity for adults is 2 hours and 30 minutes (150 minutes) of moderate intensity aerobic activity every week and muscle-strengthening activities on two or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms). Physical activity can have profound effects on decreasing cardiovascular disease risk as well as hypertension and other chronic diseases, but the literature suggests that African American women have high rates of physical inactivity (Wilder, Schuessler, Smith-Hendricks, & Grandjean, 2010).

Many people have positive intention to engage in physical activity but fail to action. In general, physical activity levels among Americans are declining (Hutchison, 2013). However, when compared to all other racial groups, middle aged African American (AAW) have lower rates of participation (Carter-Parker, Edwards, & McCleary-Jones, 2012). The Carter-Parker et al. study specifically identified middle aged African American women using the theory of planned behaviors, which measured the constructs of intention, subjective norms, and attitude. Perceived behavioral control was used to guide the design of her study. A snowball non-probability convenience sampling of African American women who were ages 35- 64 living in Oklahoma City was used. Multiple regression analysis revealed attitudes toward physical activity, and perceived behavior control for physical activity was statistically and clinically significant predictors of physical activity among the middle aged African American women in this study.

Harley and Buckworth (2009) used a grounded qualitative research method to develop a theoretical explanation of human behavior. Data collected from those exhibiting that behavior was used to guide the data collection and analysis process. A grounded theory approach was selected because of the lack of knowledge regarding the specific factors and factor relationships that comprise the process of physical activity behavioral evolution. Data derived inductively from the interviews and focus groups guided the development of a behavioral framework explaining the process of physical activity evolution. Purposeful sampling methods were used to gather information rich cases that met specified criterion. Included in this study were African American females from 25 to 45 years of age who completed at least some college or technical school beyond high school, and had a commitment to physical activity. The participants were recruited through two local African American sorority alumni associations. In-depth face-to-face interviews were conducted with physically active African American women. The interviews were guided by the research questions but were unstructured enough to allow the discovery of new ideas and themes. The interviews and focus groups were tape-recorded with the permission of the participants and transcribed verbatim. They were entered into the Atlas.ti qualitative data analysis program for analysis. A sample size of 15 women was used. The data provided by the women supplied the foundation for the development of the physical activity evolution behavior framework describing the adoption and maintenance of physical activity among African American women. This study made an important contribution to the knowledge base on the development of physical activity among African American women. By studying women who have

successfully adopted a behavior, strategies to overcome known barriers can be elucidated and applied to intervention planning for other women.

Peterson (2011) used guiding questions to solicit the attitudes and perceptions of African American women in relationship to physical activity and the Heart and Soul Physical Activity Program (HSPAP). The HSPAP project was conducted in a moderate sized (approximately 400 members) urban church. Upon completion of the HSPAP, a focus group of seven consenting participants was conducted to discuss their perceptions and attitudes related to physical activity and to evaluate the HSPAP as a strategy to promote an active lifestyle. The age of the women ranged from 42 to 65 years. The findings of the study were that the participants believed that physical activity improves health and prevents chronic diseases, however, their primary responsibility is to family and jobs, leaving little time or energy for their personal health needs. They also believed that physical activity would increase if recommended by health professionals and encouraged by family, friends, and church members and that spiritual messages and prayer would strengthen their commitment to attain an active lifestyle.

In a study conducted by Versey (2014), she addressed the sociocultural context of body appearance, with a specific focus on hair. In her study, she looked to answer why some African American women have strong ties to their hair to the point that they will avoid exercise. As a part of her research, she found that of 123 African American women aged 21 to 60, 38% of women surveyed cited avoiding exercise because of their hair. These women were also less likely to meet recommended levels for physical activity when they did exercise (<150 minutes/week). Hair concerns prevented 5.9% of the surveyed women from swimming or engaging in water activities and led 29.1% to avoid

aerobics and gym activities. The most commonly cited concern was that these women did not want to sweat out their hair. This is a barrier to physical activity these Black women face. This study found that culturally competent strategies must be developed with these concerns in mind. The study identified the link between what the women's beliefs were with regard to their hair and their behavior. Health promotion efforts should continue to incorporate multiple level strategies and select interventions that are personally meaningful to the lived experience.

In the Mama (2014) study, the effectiveness of interventions targeting psychosocial factors to increase physical activity were examined among ethnic minority adults and explored a theory used in PA interventions. Specific psychosocial factors and physical activity were examined in 11 African American/Hispanic adults. Data was collected using a standard code sheet and theory coding scheme. This study found that social support was the most common psychosocial factor reported, followed by motivational readiness, and self-efficacy, as being associated with increased physical activity. This study suggested that mental health and overall well-being are more commonly included as part of physical activity interventions than other psychosocial factors.

The study by Hutchison, Johnston, and Breckon (2013) described the development of an explanatory model of successful physical activity behavior change, grounded in relevant "real life" experiences. To achieve this, a grounded theory methodology was used. Twenty-one participants, who had previously led sedentary lifestyles and had successfully completed a physical activity referral service to increase their PA, participated and took part in in-depth interviews. All participants had been maintaining



an increase in levels of PA participation for between 4 and 7 years. The results of this study represented a call for human values to be recognized as an additional theoretical dimension in the study of exercise psychology and behavior change. The evidence presented suggested that values play a crucial role in the development of beliefs, attitudes, intentions, and associated behavioral actions.

The study conducted by Wilber et al. (2013) consisted of a 48-week lifestyle physical activity controlled trial in African American women. Social networking was the most effective approach for inviting women to the trial. Of the 609 who responded to invitations, 514 completed telephone screening; of these, 409 (80%) were found eligible. The health assessment screening was completed by 337 women; of these, 297 (88%) were found eligible. Three study conditions were designed to increase adherence to lifestyle physical activity and improve cardiovascular health in midlife African American women. All three conditions included a lifestyle physical activity prescription with an accelerometer for self-feedback and monitoring and small group meetings targeted to increase lifestyle physical activity. A total of five group visits was held every 5 weeks during the 24-week adoption period, and one booster group visit was held during the 24-week maintenance period. Results suggested that provision of health assessment screening by study staff as part of recruitment is effective in minimizing attrition and also might be cost-effective.

The purpose of Henderson's (2011) study was to explore physical activity for African American women and suggest ways that future research might be conducted to address social and environmental justice relative to health behaviors. More information about race and gender can facilitate the promotion of physical activity and healthy living

for all individuals, and can address the environmental and policy issues influencing behavior. Research focusing on qualitative data, moving beyond explanations of only racial categorical differences, embracing the cultural competence of researchers, acknowledging the importance of intersectionality, and using more theory may promote better ways of knowing about groups such as African American women. Henderson (2011) also cited that understanding the various aspects that influence behaviors of African American women can help to facilitate a better quality of life and are implications for successful interventions and for policies to assure social and environmental justice.

The Harley et al. (2014), study was conducted with 14 low-income African American women who were physically active in the years 2007-2010. The data was analyzed using thematic analysis techniques. Key themes emerged in three main categories: motivation for maintaining active lifestyle, strategies for maintaining physical activity, and challenges to maintaining physical activity. Critical challenges included financial constraints, physical strain, and history of sedentary relapse. A qualitative, asset-based approach to physical activity research contributes rich data to bridge the gap between epidemiological knowledge and community health improvement.

Kirchoff, Elliott, Schlichting, and Chin (2008) examined whether African American women who were exercise maintainers reported the same barriers to and benefits from exercise as currently inactive women and to describe maintainer's strategies. Semi structured qualitative interviews were used. Ten women were classified as exercises "maintainers" and nine as "relapsers". Both groups reported similar benefits

from and barriers to exercise. The study concluded that programs that address barriers to exercise may not be successful unless coupled with facilitators that promote maintenance.

In a meta-analysis, Glestu and Tovin (2010) examined African American women and their weight management, and physical activity. His findings were similar in nature to the studies previously mentioned. In his findings, he cited that participation in physical activity is lower in African American women than all other race-gender groups except Mexican American women. The intervention studies with primarily African American women failed to demonstrate a significant increase in physical activity behaviors over the long term (Glestsu & Tovin, 2010). The studies were qualitative in nature and explored the role of physical activity in the lives of African American women through the use of focus groups and semi structured interviews. Factors that affected adherence to physical activities were setting goals, convenient, safe places to exercise, and having social support. Some barriers to physical activity adherence were lack of child care, unsafe neighborhoods, and exercise interfered with caretaker roles. The narrative of Glestsu and Tovin (2010) indicated that future studies should focus on promoting family physical activity, as social support is key component of successful adoption of physical activity in this population.

The review of the literature examined the current research about: (a) the variables that affect the engagement and maintenance of African American women in physical activities, (b) the use of the health belief model (HBM), and (c) health promotion programs that are culturally sensitive and address the motivation toward preventative health interventions.

The majority of the studies agreed there is a need for African American women to increase their physical activity levels in order to reduce their risk of chronic disease. The research indicated that, “there are numerous challenges for them to engage in and sustain themselves in regular physical activity programming” (Harley & Buckworth, 2009, p. 347). By clearly elucidating the process for physical activity adoption and maintenance, effective programming could be implemented to reduce African American women’s burden from chronic conditions and may improve their quality of life.

### **Chapter Summary**

A focused literature review helped to analyze what the experts say with regard to effective health care intervention strategies for African American women. The literature review revealed there are health disparities that may hinder effective health care intervention strategies. Subsequently, this could affect African American women’s chances of lowering their risk of chronic diseases. The synthesis of the literature demonstrated that disparities may exist because of physician’s cultural bias, lack of physicians that are of the same racial background as African American women, lack of access to quality health care, failure to practice preventative health care, political barriers, lack of education, and socio-economic reasons. The presence of ineffective health care interventions must be addressed in order to have an impact on good health outcomes.

The studies and research reviewed, showed that intervention and health promotion programs that were not culturally based, did not demonstrate a significant enough increase in physical activity and other health promoting behaviors over the long term to make a long-term impact on reducing the African American women risk to chronic diseases. It is a common theme to incorporate culturally sensitive health promoting

programming in connection within a church or community setting. These programs were most successful because there was a sense of community trust and built-in support systems. The majority of the studies indicated that health promotion programs directed at creating healthy lifestyle behavior changes usually are 8-12 weeks in length. As documented in the data, health concerns such as hypertension, diabetes, and high cholesterol take longer to respond to non-pharmacological interventions. This leads to the argument that health promotion programs need to increase duration beyond 8-12 weeks as well as integrate the HBM into programming to ensure program participants long term adherence to healthy lifestyle adaptations (Romano & Scott, 2014). Relatively new titles such as health coaches, health intervention specialists, and community health workers have emerged over the last decade to assist in health programming. These are individuals who are either paid or volunteer their time and provide behavioral interventions as a means to address multiple unhealthy behaviors on self-management (Romano & Scott, 2014).

Researchers also have drawn on the current knowledge of correlates of participants and application of behavior theory to implement intervention programs to increase physical activity participation among African American women (Banks-Wallace, & Conn, 2002). Many of these studies resulted in modest success through reduced body weight or blood pressure or increased physical activity level during the short term, thus indicating that physical activity behavior and/or its related health effects can be affected through culturally based intervention activities. However, they do not elucidate the pathways linking the key factors and steps in a behavioral process that result in subsequent physical activity participation. Many studies have attempted to verify these

pathways through the application of existing behavioral frameworks in the physical activity domain.

Additional studies reviewed the role of motivation and barriers to physical activity in African American women as it relates to lowering their risk for chronic disease (Harley & Buckworth, 2009). Qualitative studies explored the role of physical activity in the lives of African American women through focus groups and semi-structured interviews. Common identified facilitators of physical activity included goal setting, convenient, safe places to exercise, having social support, and recommendations from health professional to engage in physical activities. Commonly identified barriers to physical activity included physical activity interfering with caretaker roles, lack of child care, unsafe neighborhoods, energy levels, and maintenance of hair.

There is a general consensus in the studies reviewed, that there is a need for the development of future culturally specific health interventions in African American women to improve health outcomes (Murrock & Gary, 2008). This study conducted a qualitative study of African American women in Westchester County, New York that examined their health promoting behavior in an effort to identify factors that richly provide insight and information to other African American women, health professionals, and other institutions that provide health care services to them. Subsequently, health promotion programs and strategies can be developed based on information provided by the women in the study. The emphasis is on lowering the African American women's risk to chronic diseases. According to the American Heart Association (2013b), improvement of health indicators may lower their risk of chronic diseases in African American women. It is important for organizations and institutions to know the effectiveness of the health

care interventions on the African-American women they serve. Culturally sensitive health care service providers that can implement appropriate health care intervention strategies are a key aspect toward improving the health of African American women (Edmonds, 2006).

Health care professionals and researchers have used the HBM and HPM as theoretical frameworks used to examine health behaviors that focus on positive changes with individuals. This researcher used the health promotion model that provide a framework to examine the health promoting behaviors of the African American women in this study. Chapter 3 discusses the methodology of this research study.

## **Chapter 3: Research Design and Methodology**

### **General Perspective/Introduction**

In Westchester County, New York, African American women have a higher prevalence of heart disease and other chronic diseases (WCHIP, 2014). According to Odoms-Young et al. (2009) and the CDC (2014), African American women are more susceptible to higher rates of morbidity and mortality because of the link between obesity to chronic diseases such as cardiovascular disease. When African American women do not engage in health promotion behaviors such as, maintaining a normal body weight and waist circumference, eating a healthy diet, and engaging in regular physical activity, they are more susceptible to an increased risk of being obese and having a chronic disease such as cardiovascular disease. In an effort to assist in the reversal of this trend, the research from this qualitative study was designed to provide information to health promotion professionals that explains why African American women engage in unhealthy behaviors verses health promoting behaviors.

With the research findings, health care professionals can use the research as a tool in designing culturally specific health care interventions that are strategic in nature and can be effective. Literature written on the factors that affect the health promoting behavior of African American women often cited health disparities, delayed, or non-existent health care interventions, cultural factors, and the African American women's basic failure to follow established health care guidelines (Smedley et al., 2003). While these are notable causes, this researcher, through her study, sought to contribute to the



literature focused on identifying the motivating factors that will improve the health promoting behavior of African American women. Cottrell and McKenzie (2011) stated, “the bottom line is that the qualitative approach alone or in combination with quantitative methods, enriches the research tool that the health education specialist has available to understand the phenomena about which decision must be made in everyday practice” (p. 244). The results of this study will inform health educators, providers, and other health professionals so they can improve culturally competent health care interventions that can address the chronic disease crisis. Pender et al. (2011) stated that the goal of improving health in any given population requires an understanding of the motivational dynamics that influence health promotional behaviors with the population of interest.

### **Research Questions**

This study examined the factors that affect the health-promoting behaviors in African American women and answered the following questions:

1. Does culture impact African American women’s willingness to adopt a healthy lifestyle?
2. What factors influence African American women’s participation in preventative health practices (health promoting behaviors)?
3. What are the factors that influence African American women’s motivation towards a healthy lifestyle?
4. What factors influence African American women’s participation in preventative health programs?

Chapter 3 presents the details pertaining to the research context, a description of the research participants and sample instruments to be used in data collection, data

analysis procedures, and a summary of the research methodology and design appropriateness.

## **Research Context**

Westchester County is located in the suburban area north of New York City which covers 450 square miles, consisting of 48 municipalities. As of 2014, the population was 972,634 (U.S. Census Bureau, 2014). The racial demographic make-up consists of White 74.4%, Black 16.1%, Hispanic/Latino 23.7%, Asian 6.2%, American Indian 0.8%, and female 51.7% (U.S. Census Bureau, 2014). The Westchester County Department of Health (WCDH) plays a leading role in promoting health, preventing disease, and prolonging the life of Westchester County, New York residents (Westchester County Department of Health, (2014a).

To comply with New York State Public Health Law, WCDH collaborated with local hospitals and other community health partners to complete a Community Health Assessment (CHA), which describes the current health status of Westchester County residents, which identifies existing gaps and health care barriers, and assesses the availability and accessibility of health care services in the county. Based on this assessment, the Westchester County Health Improvement plan (Westchester County Department of Health, 2014b) was developed. The Westchester County Health Improvement plan 2014-2017 indicates the desire to decrease the percentage of Blacks dying prematurely from heart related diseases. When comparing the combined category of obesity and overweight for Westchester County, the average age of premature death for non-Hispanic Blacks was 69.1 from 2008-2010 compared to non-Hispanic Whites where the average age was 79.9 for the same period of time (WCHIP, 2014). The report

further stated that one of the goals is to reduce racial disparities by decreasing the percentage of Blacks dying before 65 years by 5% by December 31, 2017. Currently, among Blacks who died of heart related diseases, 22.4% were premature deaths (Zimmerman et al., 2014).

According to the Community Health Assessment (CHA), (Westchester County Department of Health, 2014a), the availability of health care services are as follows: There are 10 community health centers available to Westchester County residents that provide prenatal, primary, and other medical care for individuals who have minimal or no health insurance. Each site has staff available to assist residents in enrolling in eligible insurance plans. In addition to community health centers, there are 19 hospitals in Westchester County that provide multidisciplinary of medical services, including specialties such as children's hospital, psychiatric hospitals, and veterans hospitals.

There are over 30 outdoor farmers' markets in Westchester, Rockland, and Putnam counties where affordable fresh vegetables, fruits, baked goods, and dairy products are accessible and made available for purchase from local farmers. Several of the markets offer events and activities that can turn grocery shopping into an educational and fun time for the entire family.

Westchester County has numerous opportunities for physical fitness for everyone. Bike Sundays is held 4 months out of the year and is a way for Westchester County residents to engage in physical fitness activities for free. During bicycle Sundays, a portion of the Bronx River Parkway is closed to cars for the use of bicyclists, joggers, walkers, scooters, and strollers. The course run is 13.1 miles round trip.

Another way to engage in physical fitness is the use of the FIT-Mobile. The FIT-Mobile is mobile health and fitness facility that has fitness equipment for the use of Westchester County residents. The mobile van is staffed by two fitness trainers who lead fitness activities and provides useful information on how to eat healthy. There is a nominal fee for the use of the fitness trainer services.

The use of Park and Recreation facilities is another way to engage in physical fitness. There are 52 county parks in Westchester. Within these parks there are a variety of activities such as boating and fishing, biking and hiking, golf, tennis, swimming, camping, cross-country skiing, ball fields just to name a few. There are also Fitness and Health Centers that have a variety of physical activity options from Pilates, yoga, kickboxing, cardio dance, boot camp, strength training, CrossFit, and other fitness classes. Westchester County has a plethora of opportunities to engage in health promoting activities. It is a matter of seeking the information, making a plan, and getting involved.

Additionally, the New York State Department of Health (NYSDOH) adopted the Prevention Agenda 2013-2017 a 4-year plan to identify New York's most urgent health concerns. One of the five public health areas is to prevent chronic diseases. As it relates to chronic diseases the NYSDOH and the WCHIP concur that obesity is at the foundation of chronic diseases (Westchester County Department of Health, 2014c). The Westchester County Community Health Status and Health Care Utilization (2009-2010) report from a consumer survey printed their findings in October 2011.

Over 2,000 Westchester County residents participated in the survey. The report revealed that the percentage of Black respondents found to be obese (34%) was higher

than the percentage of White respondents found to be obese (22.9%). One stated strategy to address chronic disease preventative care and management is to have health promotion programs geared to Black people under the age of 65 years of age run by health care partners. Health care partners are identified as health centers, medical providers, faith-based entities, and community-based organizations. Currently, the researcher for this study is an independent health promotion consultant interested in improving the health status of African American women and who has access to the health care partners identified by the WCHIP. The pre-focus group questionnaire was the initial instrument designed to collect demographic information and serves as a selection tool. The pre-focus group questionnaire was distributed to 100 women in this accessible group through community meetings and collected immediately for processing. Additionally, pre-focus group questionnaires were sent via emails. Follow-up phone calls were made to encourage the return of the pre-focus group questionnaires.

Based on the urgency to address chronic health care needs and disparities of African Americans, this qualitative narrative study answered the research questions as outlined by utilizing focus groups. Within the focus group setting the researcher captured the lived experiences of African American women as it relates to the factors that are motivators and barriers to engage in and sustain preventative health care practices to reduce their risk of chronic diseases. According to Krueger and Casey (2008), the purpose of a focus group is to, “listen and gather information. It is a way to understand how people feel or think about an issue. Participants are selected because they have certain characteristics in common that relate to the topic of the focus group” (p.4).

During the focus groups the participants shared their experiences as it relates to their health promoting behaviors. This process took place over a period of two months. The resulting qualitative data was analyzed. The data can be used to provide valuable information and insight to the health care partners listed earlier and assist in the improvement of health care programs that are culturally sensitive and specifically geared to African American women to address chronic disease prevention.

The study contributed to the knowledge and practice of health promotion in African American women by obtaining insight from a particular group of African American women in Westchester County, New York. The researcher examined the factors that affect African-American women's lifestyles, their perceptions and beliefs regarding health, the amount of health education, knowledge, the access to good health care providers, access to physical activity opportunities, access to quality food sources, and how appropriate health care services play a role in the execution of their engaging in and sustaining health-promoting behaviors. Identifying motivators that will encourage the motivational process among African American women is important, since a lack of motivation is a major cause for less than optimal engagement in health-promoting behaviors (Tucker et al., 2014).

### **Research Participants**

Participants for this study were recruited from locations where African American women gather. The flyers and email blasts with the questionnaire attached were sent to community centers, community churches, shopping centers, health care facilities, fitness facilities, community forums, and local sororities to obtain a convenience sample of at least 10 to 15 African American women within Westchester County, New York. A

convenience sample included those participants who were conveniently available in the sample setting. The researcher followed-up to the flyers, email blasts, and pre-focus group questionnaires as inquiries came in from the respondents. The researcher attended scheduled meetings at the NAACP, Alpha Kappa Alpha Sorority, Inc., in an effort to recruit more African American women that fit the study criteria.

The questionnaires were distributed and collected immediately for processing. The study criteria included women who identified themselves as African American and were within the age range of 30-45 years of age. This age group was selected because these women can usually make decisions on their own by age 30 and before age 45, before other age related factors increase the women's health risks. According to the CDC (2014) chronic health conditions such as cardiovascular diseases increase after age 45.

The findings from this study provides research that informs health care providers and educators which health promoting factors and strategies should be addressed with African American women prior to the research substantiated onset of increased risk of chronic disease. African American women were selected based on falling in the obese category, which is a body mass index of 30 or more, and women who have a BMI less than 30. The BMI was selected as a criteria to screen potential candidates for the study based on the fact that many chronic diseases are linked with obesity. This was an optimal group to interview regarding their lived experiences and how it relates to the implementation and the maintenance of good health habits. The purpose of using this criteria assisted the researcher in comparing and exploring the factors that affect African American women in each group.

African American women who have seen the flyers or the email blast regarding the study information and were interested in participating in the study were advised to contact the researcher via email or telephone to express their interest by a given deadline. This researcher determined if the women were suitable for the study by calculating their height and weight to determine their body mass index. Ten African American women were selected for two separate focus group interviews. The focus group participants were separated using body mass index (BMI) criteria. The women who have a BMI of 30 or more were in one group and those women with a BMI under 30 were in another group. Once the 10 candidates were identified, the researcher confirmed the focus group date, location and meeting time via electronic mail and/or telephone. Two women dropped out of the study at the last minute due to personal reasons. This left eight women for the study.

The respondents who agreed to be research participants were provided with the informed consent form for them to sign. The consent form provided the research participants with information regarding the study and the potential risks and benefits. One risk including emotional discomfort due to anxiety or embarrassment should they perceive themselves as not implementing good health habits or failing to following health a professional's advice. Participants were informed that they could follow-up with their primary physician or other health professionals as they felt was necessary to address their health care concerns. In addition, the participants were informed that their participation in this study will assist in the advancement of health interventions such as health promotion programming geared to reduce chronic conditions and improve the overall health of



African American women. The research participants each received financial compensation in the form of a gift card for their participation in the focus groups.

### **Instruments Used in Data Collection**

A demographic questionnaire (see Appendix A), specifically designed for this study was used based on identifying and documenting the participants' willingness to participate in the study, reported age, residency, educational status, height, and weight. There was no quantitative, statistical analysis developed from this data. A quantitative analysis will not answer the question of "why" some African American women engage in health promoting behaviors, while others will not. During the focus group it was the hope that the women in the group would provide valuable insight on what the motivators and barriers are to health promoting behaviors. See Appendix B for research questions and related focus group questions.

All documents received from the participants were reviewed for completion and assigned an identification number to maintain anonymity and confidentiality. Any identifying indicators were separated from the focus group data collection procedures. The selected participants were assembled at a private and confirmed focus group location and time. The set protocol was reviewed with each focus group participant. This included an announcement of the purpose of the focus group to examine the health promotion behaviors of African American women. The women were informed that the study was voluntary and they could leave the study at their own request. The women were given research study packets with the consent form (see Appendix C). The instruction commenced once the consent form was signed and secured by the researcher.

## **Procedures Used for Data Collection and Analysis**

Once the demographic questionnaire was received, the researcher reviewed the information and assigned the participants to one of the two focus groups based on the selected criteria. Subsequently, the two separate focus groups were organized and a date was selected.

The purpose of the study was to examine the factors that affect the health promoting behaviors of African American women. It was the goal of the researcher to capture their lived experiences by hearing the research participants, put into their own words, what they felt are factors that affect their motivation and what their barriers are to practicing health promoting behaviors. Questions were semi-structured to allow the researcher to expand on the line of questions based on the respondent's answers. This allowed the participants to talk freely about their experiences. The researcher let the group lead the discussion. The researcher asked the established questions as it fit into the discussion.

In order to capture the research participants verbal and non-verbal responses such as body language, the focus groups was videotaped and audiotaped. This was a way to capture the focus group activity and minimize the possibility of missing relevant information during the discussion. Additionally, it allowed the researcher to review the tapes, organize, and analyze the data and identify themes once the focus groups had concluded. The use of multiple media such as the videotaping and audiotaping ensured the trustworthiness of the data obtained and the authenticity of the discussion. It also provided a protective layer to ensure there was no researcher bias. This researcher used the recorder and videotape and stored data. Once the data was received it was stored and

imported into the research computer. The audio data was uploaded to Rev.com for transcription. The researcher analyzed the data by hand.

Data collected was coded by hand and transcription of the interview/focus group discussion was conducted. The data obtained in the two separate focus groups was used to contrast and compare the behaviors, attitudes, and perception as it related to the motivation and barriers of health promoting behaviors of the African American women in the focus groups. The data analysis consisted of the researcher reviewing the transcription text numerous times to identify possible themes, similarities, differences, and emerging themes that might provide insight as to which factors are motivators or barriers to health promoting behaviors. The addition to the body of knowledge and current research were determined by the participant's perceptions and viewpoints. The text was coded, evaluated and interpreted for meaning. Tables were created to reflect the findings. To ensure validity and reliability of the data analysis, the researcher used member checking. According to Creswell (2014), member checking is used to determine the accuracy of the qualitative findings through taking the final report or specific descriptions or themes back to the participants and determining if these participants feel that they are accurate. This researcher shared with the participants, the major findings, themes, viewpoints, and opinions of the participants to ensure that what they wanted to convey was captured. This required a follow-up meeting with the study participants to review the findings and provided an opportunity for them to comment on the findings.

Any data collected was entered into the researcher's personal computer which is secured with an administrative password. The data obtained during the study process including the focus group transcriptions, video and audiotape recordings, are stored in a

locked fire safe at the researcher's home. The contents will be destroyed 3 years after the completion of the study. Below are the focus group questions.

1. What role does your culture/up bring/family health history have on your adherence to health promoting activities?
2. What factors contribute to:
  - a) Implementation adherence of regular exercise? (CDC recommendations)
  - b) Implementation adherence of eating a balanced and nutritious diet? (CDC)
  - c) Routine health care provider visits for recommended health screenings?
3. What role does your health history play in the adherence of the recommended health promoting activities?
4. Is having good health important to you? Please explain your answer.
5. If you are informed about a health promotion program, do you participate?  
Please explain your answer.
6. If you have participated in health promotion programs have they helped you?  
Please explain your answer.
7. If you could give advice to the developers of future health promotion programs what components would you like to have in the program that would help you improve your health?

Once IRB approval was secured, the recruitment of study research participants commenced. Subsequently, the focus group procedures, as outlined, were followed. The data for this study was collected and analyzed.

The recruiting of study participants, collecting the questionnaire, and focus group implementation occurred over a period of two months. Utilizing focus group interviews

was an appropriate strategy to use in this study because this researcher was confident that it would provide the needed data and information on African American women and their knowledge level, attitudes and perception as it related to motivators and barriers to health promoting behaviors.

### **Chapter Summary**

This chapter outlined the use of two focus groups as a method to answer the research questions under consideration and to obtain insight of the perceptions and viewpoints of African American women as it related to their practicing preventative health. It outlined the rationale for this qualitative study, noting the health promotion model as the theoretical framework to glean insight on African American women's motivators and barriers to health promoting behaviors.

The researcher submitted the required application to the St. John Fisher College (SJFC) Institutional Review Board (IRB) for approval. Once granted, the researcher commenced with the study recruitment and focus group process. Subsequently, the data analysis process began. Throughout this process, the researcher kept her committee abreast of the latest developments and discussed the results at the completion of the data analysis process. Chapter 4 provides findings of the study and Chapter 5 provides implication and recommendations.

## **Chapter 4: Results**

### **Introduction**

This study examined the factors that influence African American women's health promoting behaviors and lifestyle choices such as regular physical activity, good nutrition, routine health screenings, and other health-promoting behaviors. These factors included the women's perceived benefits and barriers to health promoting behaviors, self-efficacy, interpersonal and situational influences. The researcher used Nola Pender's (Pender et al., 2011) health promotion model as a guide to examine the health promoting behavior of African American women in Westchester County, New York. This chapter begins with an overview of the research questions followed by data analysis and findings, major findings, and the chapter summary.

The composition of the eight participants in the study self-reported being African American women between the ages of 30 to 45 years old and resided in Westchester County, New York. The age range of 30 to 45 years old was selected based on the CDC (2014) stating that the risk of having chronic conditions such as cardiovascular disease increases after age 45. The researcher wanted to examine the health promoting behaviors and perceptions of this population of women before the onset of increased risk to chronic diseases. BMI is only one indicator of an individual's risk of getting a chronic disease. For the purpose of this study, the BMI ranges were used to base the relationship between body weight and increased risk of disease and death. Obese individuals are at an increased risk for many chronic disease and health conditions, including: hypertension,

high cholesterol, diabetes, stroke, heart attack, and arthritis. Individuals who know their BMI number can make changes to improve their health and save their life! This is why it is important to maintain a healthy weight. With this convenience sample of African American women, this qualitative study was conducted using an emergent style. The researcher's primary instrument for data collection was two separate focus groups. Demographic data obtained from the pre-focus group questionnaire for each participant was reviewed to calculate the women's body mass index. Each woman was asked to provide their height and weight to calculate their BMI. Focus Group A consisted of women with a body mass index (BMI) below 30 and Focus Group B consisted of women with a BMI of 30 and over. The BMI was selected as a criteria to screen potential candidates for the study based on the fact that many chronic diseases are linked to obesity. The purpose of the two separate focus groups would be to compare and contrast the health promoting behaviors of one group where their BMI is not in the obese category versus the other group of women who are in the obese category and examine the factors that are motivators and barriers to good health promotion practices.

In order to provide rich and detailed information to answer the research questions, this researcher used two separate focus groups as forums to understand the lived experiences as it relates to the factors that affect engaging in and sustaining preventative health practices among African American women. According to Cottrell (2011), focus groups allow researchers to understand a phenomenon from the discussion that ensues. It was important for the researcher to use the focus group approach to allow the participants to have free flowing discussions to get a deeper understanding of their perceptions and

the factors that affect their preventative health practices. Member checking was used to ensure that the women's statements were accurately captured.

The qualitative study included a pre-focus group questionnaire to obtain demographic information to supplement the focus group activities and provide descriptive background information on the participants. It also served as a tool to identify possible study candidates. The demographic information that was obtained from the pre-focus group questionnaire was confirmation that the women identified as African American. The questionnaire also obtained participant's body weight, height, age, marital status, education level, and confirmation of Westchester County residency. The focus groups were supplemented by a pre focus group questionnaire. Of the 78 pre-focus group questionnaires received, none of the respondents were underweight. Fifteen (19%) of the respondents had a calculated BMI of 18.5 to 24.9 reflecting a normal BMI. Twenty-three (30%) were considered overweight with a calculated BMI of 25.0 to 29.9. Twenty-seven (35%) of the respondents were obese with a calculated BMI of 30.0 to 39.9. Twelve (16%) of the respondents were considered extremely obese with a calculated BMI of greater than 40.0. According to the data collected from the respondents of the pre-focus group questionnaire, the researcher can draw the conclusion that parallels the data cited from the Westchester County Health department and the CDC, that African American women have a higher BMI than other ethnic groups and are at higher risk to having a chronic disease.

Based on the urgency to address health care needs and disparities of African Americans, the purpose of this qualitative narrative research was to capture the lived experiences of African American women as it relates to the factors that are motivators



and barriers to engage in and sustain preventative health care practices to reduce their risk of chronic diseases and promote good health.

The researcher used Pender's (1996) health promotion model which indicate, behavior specific cognitions and affect as a starting point for the research study. Pender's health promotion model identifies background factors that influence health behaviors. Pender's model has been used widely to work in collaboration with the African American population to assist them in changing behaviors and using individually tailored health interventions to achieve a healthy lifestyle.

The five factors from the health promotion model that was used in this study were, perceived benefits and barriers, self-efficacy, and interpersonal and situational influences to health promoting behavior. Perceived benefits refers to the potential positive aspect of a health action. Perceived barriers refers to the potential negative aspect of a health action. Self-efficacy refers to the women's perceptions and beliefs of their personal capability towards self-improvement. Interpersonal influences refers to the support or lack of support the women perceive they will receive while trying to live a healthy life. Situational influences to individual decisions are made based on competing demands and preferences. Refer to Table 4.1 which illustrates the themes and categories.

Table 4.1

*Categories and Related Themes*

Category and Theme	Description of Categories and Themes
Perceived Benefits	This refers to the potential positive aspect of a health action.
Perceived Barriers	This refers to the potential negative aspects of a health action.
Self-efficacy	The perception and belief of their personal capability towards self-improvement.
Interpersonal Influences	This refers to the support or lack of support the women receive while trying to live a healthy life.
Situational Influences	This refers to individual decisions made base on competing demands and preferences.

Consequently, when the researcher conducted the data analysis, an additional unanticipated factor regarding food quality emerged beyond the five identified from Pender's (1996) model. The researcher organized the five factors. It was through these five factors that the results were analyzed from the two focus group data/content. It was clear that the women's perceived barriers and benefits had the most influence on their ability to engage in health promoting behaviors and live a healthy lifestyle. Through their statements, the women identified that barriers along with benefits of health promoting behavior, had the most impact on their ability to engage in behaviors for a healthy lifestyle. Self-efficacy was a secondary concern. Interpersonal and situational

influences played a role, however, it was the least impactful. An unexpected result that came to light during the data analysis from the focus group discussions was food quality. While technically this would fall under barriers, it rose to the top as a standalone factor. One of the barriers that the women discussed was how the quality of food choices has changed for the worse. The participants explained that food quality has changed over recent decades due to the food industry putting more additives and preservatives in the food that is now available for purchase. The participants felt that the food industry is under pressure to mass produce large quantities of food in a shorter period of time and thus it has, in their opinion, diminished their choices for healthy eating. In addition, the stated other changes included a faster paced lifestyle with many more activities than in their parents' generation. They further explained that this lifestyle makes them, at times, resort to fast food establishments, which in many cases do not always offer the healthiest choices. When this happens the women indicated they would buy what was available and cost efficient.

### **Research Questions**

Four qualitative research questions were developed to understand the health promoting behavior of African American women. Guided by these research questions, this study investigated the lived experiences of African American women as it relates to the factors that are motivators and barriers to engage in and sustain preventative health care practices to reduce their risk of chronic diseases and promote good health.

The four research questions are listed below:

1. Does culture impact African American women's willingness to adopt a healthy lifestyle?

2. What factors influence African American women's participation in preventative health practices (health promoting behaviors)?
3. What are the factors that influence African American women's motivation towards a healthy lifestyle?
4. What factors influence African American women's participation in preventative health programs?

### **Data Analysis and Findings**

This section provides the major findings of the study and brief biographical information on each of the eight African American women participants. This is done to familiarize the reader with their backgrounds. Following each biography, the first research question is discussed.

**Major findings.** As discussed in the literature, there are several factors that influence African American women's health promoting behavior. This study identified five factors which were matched to Nola Pender's (Pender et al., 2011) health promotion model which indicate, behavior specific cognitions and affect. The factors identified were: African American women's perceived benefits and barriers, self-efficacy, interpersonal and situational influences to health promoting behavior. The women discussed their lived experiences including their challenges and successes with regard to living a healthy lifestyle. The summary of the major findings presents the themes of these categories.

***Perceived benefits.*** Despite the challenges the participants in this study encountered toward living a healthy life, they still acknowledged there are benefits. The data from this study indicate that the participants shared strong personal sentiments on

the importance of living a healthy life. They stated that good health, a better quality of life, being happy, and a good role model for their children were extremely important. The most important benefit was good health. Each woman communicated her desire to be in her best health. The women indicated that quality of life was a very important component to being in their best health. As a group, the women described quality of life as being free of disease, in good health, physically, mentally, and emotionally, and having overall well-being.

***Perceived barriers.*** African American women typically face numerous challenges throughout their life with regard to maintaining good health. The factor that the women perceived as having the greatest impact on their health promoting behavior was environmental barriers. The challenges the women perceive as being barriers included culture, lack of time, family obligations, family history of disease, personal history of disease, food quality, lack of finances, and personal commitment in their effort to lead a healthy life. The data revealed many barriers the women face as they attempt to lead a healthy lifestyle.

***Perceived self-efficacy.*** African American women in this study believed that they have the personal capability to organize and execute a particular health behavior and improve their overall health. They portrayed self-confidence and indicated throughout the focus group discussions, that they are confident given the right conditions, resources, and support systems that they would successfully improve their health promoting behavior.

***Interpersonal influences.*** The women believe interpersonal influences such as family, medical professionals, and friends were encouraging them. Perceptions concerning the behaviors, beliefs, or attitudes of relevant others in regard to engaging in a

specific behavior were indicated as strong influences among the women. There were supportive influences that made the women feel supported. For example, social norms included family and friends that verbally expressed how they supported the women and how they wanted them to be successful in their endeavor to participate in healthy living practices. Social support included, the hands-on support received, encouragement, and reward by engaging in healthy living practices with them. For example, the women's family, friends, and co-workers supported them by asking to engage in eating healthy meals and exercise with them. Any of these supportive influencers have been role models for the women.

***Situational influences.*** Situational lifestyle choices play a role here. The women expressed that depending on the situation, they have been and could be influenced to engage in certain health promoting activities. They stated situations such as finding cost-effective locations to engage in physical activity that were fun and offered childcare in a safe location was crucial to their success. The women recognized that they are responsible for their health and the action steps they took toward leading a healthy lifestyle. They communicated that it can be a challenge based on what is going on in their life on a day to day basis. They stated that they know that conscious decisions have to be made to eat healthy, be physically active on a routine basis, and go to their doctor for health screening regularly. They wanted to be healthy and successful in their efforts. Some of them reported that they may not be as cognizant as they should be with the lifestyle choices they have made. The majority of the women explained the sacrifices they had to make to lead a healthy life and felt that they were in a dilemma to do so most of the time.

**Unanticipated results.** There are findings that were not previously identified in the literature. The unanticipated result of the study was that food quality had a significant effect on the women making healthy food selections. The women felt that the quality of the food has changed over recent decades which has, as they expressed, “diminished their options for healthy eating.” It was stated that the lifestyle they lived as a child, incorporated more fresh and natural foods and less food items that were processed with artificial ingredients. They feel that the demand for food is more rapid and there is pressure to manufacture more food in less time as compared to prior decades. Therefore, the women in the study felt, there is a dependency on processed and fast food. In addition, their lifestyle has changed as well. They explained how they live in a fast-pace environment and there is not enough time to shop, prepare, and eat healthy food or engage in physical activities on a regular basis. They want to live a healthy life, however, due to barriers they are unable to do as they desire. The women expressed that they have to use their knowledge and be proactive in their selection of healthy food options.

**Identification of themes.** The researcher had each focus group audiotaped recording transcribed by a professional third party transcription company. Each transcript was thoroughly analyzed line by line, extracting key statements, and these key statements were entered into Microsoft Excel. Again, keeping the theoretical framework in mind the researcher used Nola Pender’s (1996) health promotion model (perceived benefits to action, perceived barriers to action, perceived self-efficacy, interpersonal influences, and situational influences) to group the key statements, which also aligned with the research questions. Responses from the focus groups were coded into themes and categories and then sorted into tables according to the themes. This method was helpful for analyzing

the data for each research question and identifying the frequency of each theme. The discussions in the focus groups highlighted the meanings the participants gave to their lived experiences with regard to their health promoting behaviors. In order to understand the meaning behind their experiences, the researcher used the data driven coding technique to identify themes discovered in the transcripts while keeping the literature review in mind.

**Frequency of themes.** Findings revealed a list of emerging themes, their categories, and associated frequencies as displayed in Table 4.2.

Table 4.2

*Categories and Themes (Frequency)*

Category	Theme (Frequency)
Perceived Barriers (113)	Food Choices/Quality of food (27)
	Family (23)
	Culture (21)
	Time (18)
	Finances (12)
	Commitment (12)
Perceived Benefits (94)	Good Health(34)
	Better Quality(22)
	Longevity (17)
	Happy (15)
	Role Model (6)
Self-Efficacy (67)	Knowledge (23)
	Personal History (19)
	Opportunity (14)
	Support (11)
Interpersonal Influences (42)	Family (23)
	Friends (14)
	Medical Professionals (5)
Situational Influences (26)	Life Demands (16)
	Geographic/Location (6)
	Physical Activities (4)



The analysis and coding of 342 statements yielded the development of 22 themes. The frequency of themes aligned as follows: 113 to perceived barriers, 94 to perceived benefits, 67 to self-efficacy, 42 to interpersonal influences and 26 to situational influences.

**Participant profiles.** Pre-focus group questionnaires were distributed to 102 African American women who attended three different community meetings in Westchester County, New York. Of the 102 questionnaires distributed, 78 were returned. Of these 78 women, 22 were identified as meeting the study requirements. Due to scheduling issues, only 10 women out of the 22 women could participate in the focus groups. The 10 women signed the consent form and were ready to participate in the group. The 10 women were divided into two focus groups.

***Focus group A.*** Focus group A consisted of six women who had a BMI under 30. On the day of the study, two of the participants dropped out of focus group A. One dropped out because she had an emergency and the other for an unforeseen scheduling conflict. Of the four remaining women, 50% of them were between the ages of 30-39, and the other 50% were between the ages 40-45. They are identified below as Participant 1, Participant 2, Participant 3, and Participant 4.

***Participant 1.*** Participant 1 was in the age group 30-39 and identified as African American woman. She was not married and had one young son. She had a high school diploma and was going back to school to finish her bachelor's degree.

***Participant 2.*** Similar to Participant 1, Participant 2 was in the age group 30-39 and identified as African American woman. She was not married and had one young son.

She had a high school diploma and planned to go back to school to finish her bachelor's degree.

*Participant 3.* Participant 3 was in the age group 40-45 and identified as an African American woman. She was separated with three teenage children. She had a master's degree.

*Participant 4.* Participant 4 was in the age group 40-45 and identified as an African American woman. She was married with two children under the age 11. She had a bachelor's degree.

***Focus group B.*** Focus group B consisted of four women who had a BMI of 30 or over. Of these women, 75% were between the ages 30-39 and 25% were between the ages 40-45. They are identified below as Participant 5 Participant 6, Participant 7, and Participant 8.

*Participant 5.* Participant 5 was in the age group 30-39 and identified as an African American woman. She was married and pregnant with her first child. She had a master's degree.

*Participant 6.* Participant 6 was in the age group 30-39 and identified as an African American woman. She was married with one young child. She had a high school diploma.

*Participant 7.* Participant 7 was in the age group 40-45 and identified as an African American woman. She was married with three children. She had a master's degree.

*Participant 8.* Participant 8 was in the age group 40-45 and identified as an African American woman. She was separated with three teenage children. She had a master's degree.

Overall, the composition of the research participants consisted of eight African American women who were employed full-time and had children with ages ranging from 8 months to 19 years old. Two of the women were not married, four of the women were married, one woman was divorced, and one woman was separated. Five of the women were between the ages of 30-39 years old and three of the women were between the ages of 40-45 years old. Three of the women had high school diplomas, one woman had a bachelor's degree, and four of the women had master's degrees. They resided in Westchester County, New York. The individual participant profiles in Table 4.3 give more specific details of each of the women.

Table 4.3

*Characteristics of Participants*

Characteristic	Data	Number of Participants
Age:	30-39	5
	40-45	3
Ethnicity:	African American	8
Marital Status:	Not Married	2
	Married	4
	Divorced	1
	Separated	1
Degree of Study:	High School	3
	Bachelor's	1
	Master's	4

Each of the focus group questions were mapped to the four research questions; refer to Table 4.3. This will give the reader the opportunity to gain insight into how the African American women perceive themselves and their ability to participate in preventative health activities.

**Research question 1.** Does culture impact African American women's willingness to adopt a healthy lifestyle? Focus group questions 1 and 2 were designed to answer research question 1. The women in both focus groups provided detailed evidence of cultural, familial, and childhood upbringing as factors that impact their willingness to adopt a healthy lifestyle. The women in focus group A explained how because of their interpersonal influences of family history of chronic disease, they have made a concerted effort in the implementation of eating healthy, exercising, and following their doctor's recommendations for health screening to meet their individual health care needs. Focus group B discussions reflected the fact that culture had an impact on their health promoting activities and there was acknowledgement of family history of disease, but no consistent and definitive action plan to counteract their susceptibility to getting the disease was discussed.

**Focus group question 1.** Focus group question 1 asked: Is good health important to you? Please explain your answer. This question was developed to have a conversation about what the participants defined as good health and to confirm if it was their desire to have good health. Overall, all the women agreed that having good health was important to them because they wanted to be able to enjoy life to the fullest for as long as they could. Therefore, longevity and quality of life issues were predominant factors for this

group of women. However, the women expressed, that they felt their culture and lifestyle present challenges in practicing some preventative health activities. In focus group A, the women expressed the perceived benefit of good health as the ability of living a long and healthy life which included physical, mental, and overall well-being. Focus group B summarized their thoughts on good health as being a role model and having a legacy for their children. Focus group A responses included the following comments. Participant 1 expressed, “Having good health is good because it helps you live long, you are happier, and you are stress free, your love life is better. You are just happier when you are healthier.” Participant 2 agreed with the first participant’s statements and added, “Having good health makes you feel good and more upbeat.”

Participant 3 stated that,

Having good health is important to me because when I was at the poorest of my health, I was at a place when I was my unhappiest, I was the poorest at my health. I made the connection between my happiness and my health very early in life. If I lose weight, that’s nice, but that is not my aim. My aim is for my mental health and my happiness.

Participant 4 stated that,

It is important to me, I think, in theory I know it’s important. Day to day, I’m not sure that I prioritize it that way, but it’s important to me because I know that it affects my longevity, I know that it affects just how I feel, the amount of sleep I get, my energy, just my overall well-being.

Focus group B responses included these statements that follow. Participant 5 declared,

It is important because a lot of health issues run in my family. For me, it's important to make sure that I keep myself healthy. The goal is always to lose weight, but besides that, it's to make sure that blood pressure and sugar is all where it needs to be. Regardless of how I look on the outside, I want to make sure my inside is healthy. For me, that is very important because that runs in my family. To keep healthy and to stay active has really helped me with keeping blood pressure down, sugar down, all that good stuff. I don't have issues with that. That's why I keep exercising. That's why it is important to me.

Participant 6 explained, "It's really important to me because high blood pressure runs in my family, as well as diabetes. I don't exercise as much as I should, but I do watch what I eat."

Participant 7 stated,

Yes, it's very important to me as well, but I don't prioritize it. It is important in order to live a long life. We all wanna be here. As a mom, you know, you wanna be here with your children, enjoying life, and having good quality of life.

Participant 8 simply stated, "Good health is something I can pass on to my children."

There was no difference in responses from the participants in focus groups A and B despite their reality.

***Focus group question 2.*** Focus group question 2 asked: What role does your culture, upbringing, and family history have on your adherence to health promoting activities? The women engaged in lively conversation regarding the role their culture, upbringing, and family played in their ability to adhere to certain health promoting activities. Each area was discussed in great detail in both focus groups.

*Focus group question 2a – culture.* Overall, Participant 1 indicated that she did not want to repeat the cycle of poor health which she revealed existed in her culture, family, and upbringing. Participant 2 strongly stated,

It's an example of what I don't want to be. The southern food such as collard greens with pork in it and macaroni and cheese. All that stuff is good. I mean I still eat it, but I know it is not good all the time. Cause then you be overweight and where I come from, it's not bad to be overweight. They call it thick.

(She was referring to people in the Southern culture, such as family and friends.)

Participant 3 expressed,

That in our culture, our African descent culture, food equals family. It is happiness. It is love. It's affection. That is what they are giving you. And you're going to say no? My aunt makes the best pudding, and she won't be around for too much longer. When I go to her house and she has the pudding on the table, I'll take some and share the rest with my co-workers and my friends. My aunt won't be around forever, and I want to taste my aunt's pudding. Food is family. There is a personal attachment to the food as well which I think is culture.

Focus group B responses on culture included: Participant 5 explained,

That being African American, I think plays a big part in culture because your parents, your grandparents, your great grandparents, they didn't watch what they cooked with. To them, that was good. That was fine. They felt they had no issues, but when you look back, you say, "Wait a minute. They had sugar (referring to having diabetes) they had this and that. To them, it wasn't a big deal. It wasn't nothing they talked about. A lot of them had this stuff, didn't know it, and passed

away. As generations move on, your parent, your grandparents, my family still cooks like that. There is nothing wrong with eating like that at certain times, but not every day, occasionally.

Participant 5 went on to explain how she handles situations where family members cook cultural meals that may not be as healthy as she would like. She stated,

What I usually do is plan and prepare. So if I know I'm going to visit family, I know how they cook and how they eat. I know I need to prepare myself, I'll have this meal. I might not have much. You don't want to say to them, "you need to cook this way." They are not trying to hear that. Culturally, they are going to cook the way they want to cook. They are going to use their lard, they are going to use butter. They are going to use all that right? When you are in other people's presence that cook like that, you just be aware and just prepare yourself. It all comes with control. I know I am going to have this meal. For the rest of the day, I know I need to eat light. You don't want to hurt anyone's feelings. That part of culture, not slighting anyone and telling them, "hey listen, you're not eating right". They are like, I am 78 years old, and I am still living. That's a big part of culture.

Participant 6 agreed with Participants 3 and 5 when she stated that,

I have an aunt that cooks culturally delicious food, but I don't not want to offend her when she cooks something I don't usually have. This is usually the case when I go to a cookout or another social outing where food is prepared in a manner that may not be the healthiest. In those instances, I say no thank you. I'm okay.



Participant 8 described how her Jamaican culture and upbringing differed from her African American experience in the following way.

I have my culture and I will say here (in the United States) is a different culture. Like back home where I'm from, Jamaica, we grow our stuff, so we have our vegetables, and we have our fruit trees and it is easy for us to go outside and pick fruits and vegetables. That would be like a quick, little lunch or little snack in between. Unlike here, where you don't have that option to go outside and pick off the fruit from the tree. So, it's much easier to grab a snack from the cupboard. It depends on what you put in the cupboard. Some stuff that you consider healthy, it isn't healthy, but you just can't help it. And some stuff that is healthy, has no taste. Back home you have options. We have a lot of different fruit trees, so if we don't feel for mangoes today, we can always go for guineps. If not guineps, you go for pawpaw, we go for whatever is there.

The general consensus of the women in focus group B indicated that culture has a huge impact and often it sabotages their ability to perform healthy activities. The women in focus group A indicated that although they were aware of the cultural barriers, they stated that they had a plan to deal with those situations, such as partaking in the cultural meal, but not eating it all and sharing the rest with co-workers and friends. They were motivated and empowered to do better so they could break the family history of poor health. They took more of an active role in the implementation of healthy activities to combat cultural barriers they encountered.

*Focus group question 2b — upbringing.* Each woman explained how their upbringing had a specific role in their ability to adhere to health promoting activities and

how they approached health promoting activities in their individual lives. Focus group A responses included various thoughts on their upbringing. Participant 1 and Participant 2 explained in vivid detail, how they were encouraged as children to go outside to play and they would do so for hours. Going outside to get fresh air and play was a big part of their upbringing. They felt that this was a good basis for them to continue exercising as adults now. The other women in focus group A echoed their sentiments. Participant 1 explained,

When I was growing up, I was always active. I [was] biking, walking, rollerblading and stuff like that. I remember doing all that when I was young. My mom would tell me go do it. As I got older I played tennis and ran track so I still have that knowledge. I use to play basketball. It's like when you grow up and you learn it, you never forget it.

Participant 2 shared,

I played a lot outside too. But that's being young. I ran track. I was dancing for the Westchester Invaders, doing all that. They were a drum core group that danced in parades. I also jumped double dutch and went swimming. I loved to swim.

Participant 4 shared in great detail the healthy routine of eating well-balanced and nutritious meals. She stated that her parents set a good foundation for sitting down at the dining table, eating meals together, and eating meals that were portion controlled. In addition, she shared how she was physically active as a child into adulthood. She said,

As a child I loved to run and play various games with the neighborhood kids. We would play outside for hours and had to come in the house when the street lights

came on. In grade school I ran track and in high school I played varsity volleyball. Even now, I play volleyball in an adult league.

In contrast, the women in focus group B explained how they found it difficult to replicate healthy practices that were a foundation as they were growing up. The women attributed the difficulty to the change in their lifestyle compared to their parents' generation where they felt their generation had less to do and therefore had the time to food shop, prepare meals, and exercise. Participant 7 shared,

Things have changed over time. If I look at when I was born in the '80s, just how things have progressed when it comes to food, exercise, energy, and sleep. We did not watch TVs and use computers as much as we do now. We were more active then. Maybe we had fast food once a month. Now we are busy and rely on fast food. Everyone has a car now. It's just so different. I think my mother read food labels. But do I always read labels? I am running to the grocery store and grabbing whatever we are out of.

*Focus group question 2c – family history.* There was an overwhelming consensus among the women, that family history definitely has had a role in their ability to adhere to health promoting activities. Each women had been impacted by a family history of chronic diseases such as cancer, diabetes, and heart disease. In most cases, the women agreed that having a family history of disease was a call to action for their lives. Participant 3 explained, “My grandmother died of diabetes. My dad has it. My aunt has it. Diabetes and high blood pressure run in my family.” In addition, Participant 3 was further influenced by her own susceptibility to getting diabetes. She stated,

I had gestational diabetes. I was told that that meant, at some point, I'm going to have it too. That stuck in the back of my mind. I've got to watch what I eat. It might happen, it might not. If you control what you eat, you exercise, and live a healthy life, you may not get it.

Participant 3 explained that her doctor stated, "You are prone to get it because it's in your family, and you had it during your pregnancy." Hence, the preventative practice she says she engaged in is, "not eating the sweet stuff and all that. It's brown everything for me, brown rice, brown sugar, brown pasta, brown everything. I keep the carbs down."

Participant 1 stated,

Personally, I haven't had health issues or health scares. Ever, since I've been young, I have been very active. I think that played a big part. I've seen, just knowing the history in my family, my grandmother who passed away, was very obese. For me, I think at a certain age, it opened my eyes. I don't want to go down that road.

Focus group B responses echoed the concerns of focus group A. Participant 6 stated, "Diabetes runs in my family, so I don't eat sweets. My mom has type 2 diabetes. She has also had a heart attack at 41. She cooks really healthy now. So does my grandmother. I try to eat healthy." Participant 7 acknowledged that family members lived to an extreme old age.

My great-grandmother died from falling down the stairs, my grandmother who lived till the 2000s had a heart attack, had two strokes. My mother had a heart attack at 62 and died, you know. So, I think something is different, you know when you have people in a different generation lived long in your family. Very

long, no major health issues. Then if you do more, then accidental death or extreme old age. My grandmother was in her 90s. In her generation they smoked cigarettes. There was a big cigarette push back then. I think that is relevant when it comes to health.

**Research questions 2 and 3.** Research question 2 asked, What factors influence African American women's participation in preventative health practices (health promoting behavior)? Research question 3 asked, What factors influence African American women's motivation towards a healthy lifestyle? Focus group questions 3a, 3b, 3c, 4, and 5 were designed to answer research questions 2 and 3. There was an overwhelming agreement amongst the women who felt that their family history was a major influence on their participation in preventative health practices and motivation towards a healthy lifestyle.

**Focus group question 3a.** What factors contribute to your implementation and adherence of regular exercise as per the CDC recommended guidelines? The CDC guidelines for adults practicing regular exercise state: 2 hours and 30 minutes (150 minutes) of moderate-intensity aerobic activity (i.e., brisk walking) every week and muscle-strengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms) (CDC, 2008) is recommended.

In terms of physical activities, the women in focus group A reported that they were physically active at least once or twice a week. During their discussions, they demonstrated that they had a more proactive approach to physical activity. Although each of their approaches were different, they all had a plan for routine physical activity. In

focus group B there was one woman that was physically active at least two to three times a week. She reported that she was a participant in Zumba classes on a regular basis. The main reason for this was because she was being held accountable for being in the class. The instructor and her peers would look for her. The other three women in focus group B stated that they wished they were more physically active. The women in this group admitted to have excuses such as being busy with work, a child, errands, and life and they let these interpersonal and situational influences become barriers towards engaging in regular physical activities. Participant 3 stated that,

It all depends on what's happening in my life at the time. I exercise because I enjoy it. I do have a gym membership and I do use it. When things happen in my life such as taking my dad on medical appointments and my daughter had things to do, those thing interfere with my regular routine. I try to go to Crunch gym at least twice a week, catch Zumba class during the week. I make it a part of my routine, just like going to work. Having a routine helps. I remember sometimes for 3 or 4 months straight, I'm able to keep on that routine, and then life happens. When my lifestyle changes, for whatever reason, usually family, even more recently, job. I got a new job a year and half ago, so I couldn't do the routine I had before.

Focus Group B responses were similar. Participant 5 explained,

When it comes to the exercise part of it, I actually enjoy it. You find your niche or something that you like, where it be weight training or a form of cardio dance. You do it if you like it. It really is a stress reliever too. It makes you feel so much better. I do it because I love it, and also, the extra perk is being healthy.

Sometimes life can get in the way, however, I stay in a routine and workout with people. I do a lot of Zumba. We are constantly in the same classes and doing the same thing. If you are not there, you've got some that is holding you accountable for not being there. They are saying, "Hey, where are you? Hey, are you coming tomorrow? You better be here!" I have a lot of instructors that do that. They pull me in. That's another thing, life, but also you have to be accountable. If you know you did do this today, they you know what, I've got to make an extra effort to get there tomorrow because I know somebody's going to be saying to me, "You need to get in the gym. You need to get to class. It's about accountability.

Participant 6, she stated that on a routine basis she was physically active on a job where she didn't stop moving. This was her way of explaining that she was more physically active on her former job because she was constantly moving. In her current job, she is less active. She went on to further explain how this has affected her;

It is very hard to adhere to something when it's not in your routine anymore. I don't exercise at all. That is something that I would love to work with and get back into, or putting into my routine more, is to exercise.

Participant 7 raised an issue regarding the shift away from physical activity.

Everyone has a car. It is just so different, our lifestyles. Back then, we use to walk more. Now exercise is not part of her schedule as it was in the past. I am not adhering to the CDC guidelines for exercise. I have three kids and I am busy. I don't prioritize it. That's an excuse, 'cause there are people with kids that do. I just, it is hard.

Participant 8 stated.

I think I'm meeting it (CDC guidelines) with all that I'm doing I work at night, and I do a lot of walking at night you know back and forth. I have kids. I do a lot of walking. Although I mop and vacuum, it doesn't feel like you're really doing anything. A normal, good workout is just either going to the gym or walking. That is a complete workout.

***Focus group question 3b.*** What factors contribute to your implementation and adherence of eating a balanced and nutritious diet as per the CDC recommended guidelines? The CDC guidelines for adult's healthy eating plan were: Emphasis on eating fruits, vegetables, whole grains, and fat-free or low-fat milk, and milk products; including lean meats, poultry, fish, beans, eggs, and nuts; a diet low in saturated fats, trans-fats, cholesterol, salt (sodium), and added sugars; and staying within your daily calorie needs (CDC, 2016).

Although the women in focus group A encountered numerous obstacles such as the perceived barriers of lifestyle changes, they were able to use their healthy eating habits of the past as a foundation to rebound and eat healthy in the future. Focus group B on the other hand struggled with consistent implementation and adherence of eating balanced and nutritious meals. The availability of healthy food was a factor in both focus groups. In focus group B there was more reliance on fast food and whatever they could get their hands on quickly. This was especially true when they were "starving." In focus group A they explained how they had a more proactive approach by seeking out healthy restaurants or they would bring food with them that they made at home. Focus group A Participant 2 described her healthy eating plan in the following manner,



I meal plan. I've been doing it for maybe a month now. I buy chicken and make it different ways. I just make a lot of it. And then some green beans or some asparagus and then the sweet potatoes. And then I'll put it in containers. Because that easier for me. Fast food doesn't satisfy me.

Participant 3 attested that her routine and lifestyle are factors that contribute to her ability to adhere to eating a balanced and nutritious meal. For the first 6 months on her new job she explained,

I would prepare my food for lunch. I went to Sam's and bought my little containers and packed salad and salmon. Preparing my meals really helped. They (co-workers) would always laugh at me because of my containers. Then the work got more and more, and I didn't have time to pack at night. I am not working near restaurants where there was healthy choices. I work near Popeye's and McDonalds. My co-workers go to these places and ask me if I want some. That's what you are going to get because that where they are going, I've been at work for 7 hours. I'm starving. So I start eating what is available and what's not pricey. I realized when my lifestyle changed, my eating habits and my exercise changes. But now that things are starting to settle now and I am getting into a routine. I can go back to preparing my lunch the night before and bringing it to work.

Participant 4, explained that it was her culture and upbringing that encouraged her to focus on health. In fact, she stated,

We watched our portions. I was raised to watch my portions. It was this amount of chicken, this amount of rice, you know, carbs, it was this amount of greens. We had dessert every night, but it was portioned. She further explained another health

promoting activity was sleep. Definitely in the bed by 7:30 p.m. so you received 10 to 11 hours of sleep a night. I can say I didn't miss a day of school due to illness. Not a day. My body fat, if they even measured it then would've been less. My eating habits were excellent. Sleeping habits were excellent. Exercise was excellent. As children, we were outside. I was in every sport that you could think of. Put me out on my own in college? I ruined it as soon as I was given my independence. However, I know what has to be done and although it is hard, I try to implement healthy eating every day.

Focus group B shared their perspectives on meals and food selection. Participant 5 explained that she usually had a strategy especially when she went to eat out at other places.

I know what I'm going into already, if it is a social setting where everyone brings a dish, I will bring a garden salad or fruit salad. If I am going to a barbeque, I will take the skin off the chicken.

When it comes to the work week, Participant 5 stated,

You may get lazy. You don't want to go to the supermarket at eight or nine o'clock at night. Then I'll grab whatever, which is good for preparing. I can grab a yogurt or something that I know I can take with me. If I don't do that, then during the week, I am not going to do that. I have to tell myself it takes 10 minutes to pack some stuff in a bag.

Participant 5 admits, if she doesn't prepare her lunch then, "I'm eating chipotle, Five Guys, Wendy's. Its five o'clock, I'll go get me a slice of pizza." Participant 5 went on to mention, they need to put regulations on the prices of healthy foods.

That turns a lot of people away. They want to eat healthy. You go to those place, and they are three time as much as the other foods. People are like, I can't afford that. I have to just go with this.

Participant 6 shared that availability has a lot to do with adhering to eating a balanced and nutritious diet. She explained that her day is jam packed.

That means I am out from 11 to eight. I love to eat healthy foods, but on those days, in that moment when I'm starving, if healthy food isn't available, I cannot eat it. I'm just going to grab and go, drive thru, because that is what is available to me. If there was a drive-thru that had a bow of fruit salad that would be healthier because that is what would be available to me. Then option when you are ripping and running and you don't have time, its fast food. You can get apple slices at McDonalds, but I don't. I get a burger and fries, because that's what is going to fill me up at that point in time. That's what is available to me. At the supermarket, it available. You can pick and choose, but I guess it's circumstantial when you are out and about, and you can't grab something healthy to eat, or it's pricey.

Wendy's has four for four. At Chipotle, which would probably be healthier, it's \$12, and there is no drive-thru. I think two factors would be availability and price.

Reading the food nutrition labels was an important factor to the majority of the women from both focus groups. They articulated the importance of reading the nutrition labels so that they would make a conscious effort to put healthy nutrients in their body verses ingredients that may be harmful to them. This was especially true for the women that self-identified with a chronic disease such as diabetes. Another contributing factor to eating a balanced and nutritious meal for these women, especially when they are on the

go, was the availability and price of the food. Because they stated healthy food is expensive, they had to look for cost effective alternatives that were readily available when they needed to eat. Participant 7 indicated that,

So, I think my upbringing and culture was one to be healthy. You know, you could take your vitamins. You have to eat your vegetables; but I think in general in my childhood we ate more home cooked meals. There was also less awareness and knowledge back then about salt and fatty foods. So although the food was home-cooked, they cooked food using salt, sugar, and frying it. Now, knowing what we know about health, I think it could've been better. Right now my family doesn't eat that much pork. We eat more chicken, less red meat. Back then there was less fast food, it just wasn't our culture. Now everything is busy, right? So, I do a lot more fast food.

Participant 8 interrupted Participant 7 by saying,

I don't want to interrupt you, but back in the 70s, though, it wasn't like that. The things they put in the food now. It was way different then, things were a little better. Food was a little better. Now, we would say we die from certain things because of what they have in the food products now. For example, they are mass-producing chickens now. There is genetically modified food (GMO's). I'm reading the ingredients now. Back in the 70s you pick up your stuff, you didn't even have to read the ingredients. The food quality was ok. The food industry has changed a whole lot. They put more additives and preservatives in the food now.

***Focus group question 3c.*** What factors contribute to your implementation and adherence of routine health provider visits for recommended health screenings? In terms

of routine health care provider visits, the women in focus group A reported that they were diligent in scheduling routine appointments to keep up with their health care needs. In focus group B Participant 7 explained how she is hesitant to schedule appointments for herself because she is aware of her health history and she is concerned the doctor's will put her on medication. This is where the interpersonal influences of previous health provider visits became a perceived barrier to adhering to routine health providers visits. In her case, scheduling health provider appointments for her children were a priority. Following are comments from focus group A relative to health screenings. Participant 1 cited, "I just had a physical. I need to make an appointment with the dentist." Participant 2 stated, "I had my last physical and pap smear in February." Focus group B participants commented on health care appointments. Participant 5 reported that she goes on regular doctor's visits. Recently, she went to the doctor's office because she was pregnant. She revealed,

I felt like I was labeled by the medical professionals during an office visit. The medical professionals made assumptions, because of my age, weight, and high risk they suggested that I go on the Atkins diet. I was offended because they said, "wait, you're actually ok." I'm like, "How about that, I am actually okay." You didn't ask me. You automatically put me in this box. If you would have asked me, I would tell you what I do.

Participant 7 shared, "I don't go to the doctor really because I know... I don't like medication. I really will avoid taking the medication anyway. And I know they are probably gonna give me medication." Although Participant 7 said she doesn't go for annual physical exams, she admitted that she goes to the gynecologist and the eye doctor.

She said “I get my kids to the doctor, you know. So yeah, that is.... That is true. I should go to the doctor.”

*Focus group question 4.* What role does your health history play in the adherence of the recommended health promoting activities? The women in focus group A openly discussed their health history and the challenges they encountered trying to adhere to certain health promoting activities. Although they were faced with interpersonal and situational influences and discussed their perceived barriers, each member in focus group A told a story about the steps they took to ensure they stayed healthy and did have not another “health scare.” The women in focus group B were not as open in their discussion on their adhering to the recommended health promoting activities. They were not as consistent in their implementation of health promoting activities. Focus group A Participant 1 said,

Well, the doctor did say my sugar level was high. And I think she was just watching it because I told her my dad has diabetes. So she just wants me to just be conscious of my sugar intake. And I don't eat that many sweets because that's something I don't buy because you know I don't have any control of it if I do. I think like with bread and stuff like that. Cause that turns into sugar. I've been watching my bread intake. And like white rice and stuff like that I don't eat. I am trying to eat more vegetables. And I don't really fry stuff at home. Usually I bake stuff.

Participant 2 discussed her health scare as a factor for adhering to recommendations.

That problem with the heart was a big scare. And then the doctor told me not to do as much cardio, but I've felt like, the more I've done it, I've been better at it. I

have a platelet disorder and that's gotten better. I eat better. I get my blood check four times a year by a hematologist. I drink alkaline water and eat fruits and vegetables.

Participant 3 said,

I did have a mini stroke, nothing to laugh about. When I was 35 I had a mini-stroke at work. I was just sitting there and my face started sliding down. I went back to think it was family stuff. It's high blood pressure. More recently I have been diagnosed with high blood pressure. I know it's stress and work related. Like I said earlier, my emotional self and my health self goes hand in hand. I know that if I am not emotionally well, my health is not well. For me that is where the connection is. That is why it is important for me to exercise and eat healthy food.

Focus group B Participant 7 said,

I am overweight. I am always trying to find clothes that fit. I use to be a skinny girl. I say to myself, "oh, I should do this better today. But it depends. I was hospitalized because I was so sick. I was sick for a while so I tried to be more hyper vigilant about certain things. When I went grocery shopping I would make sure we aren't getting any more sweets. I cut back on certain meats. Everyone once in a while I'll pick up a sugary juice and keep that in the house.

**Research question four.** What factors influence African American women's participation in preventative health programs? Focus group questions 5 and 6 were designed to answer research question 4.

**Focus group question 5.** If you have participated in health promotion programs have they helped you? Please explain your answer. Health promotion programs in general

are designed to educate and engage the participants in healthy lifestyle activities and workshops in an effort to improve their health. Health promotion programs can be a short term initiative such as a workshop for one hour or extended over months or years. They are usually lead by a health professional in a community, business, or medical setting. In both focus groups, all women had participated in health promotion programs such as work place wellness programs, Weight Watchers, and Women Infant and Children (W.I.C.).

Participant 4 had the most extensive information to share regarding her experience with a health promotion program where the emphasis was on nutrition. Participant 4 explained,

It was an eight-week program where they taught us how to grocery shop, how to plan, how to make meals. We actually cooked there. Read labels. You know, we went through this whole thing for eight weeks. I have a certificate in it. Although it was a community program, I was encouraged to attend because my children attended the nurse school the nutrition program was associated with. This was done in an effort to teach the parents basic nutrition tips and strategies for good health. When I went food shopping they taught us to bring a food shopping list. Once we went shopping we had to bring the list and the receipt back to the session the following week. They held us accountable and it really didn't infringe on my life. When the program ended and I no longer had to show receipts, I didn't keep it up. I didn't adopt the habits I learned.

***Focus group question 6.*** If you could give advice to the developers of future health promotion programs, what components would you like to have in the program that would help you improve your health? This focus group question was developed to allow



the focus group participants to share their advice and opinions on future health promotion initiatives. It gave the researcher the opportunity to understand the health promotion needs of African American women. The women's advice included: Alternative ways to prepare cultural food in a healthy way, offer meal planning/preparation (quick/simple), nutrition/ cooking classes, offer an incentive/reward program that would make the women accountable; in the workplace- provide healthy food options, gym services, or discount on memberships. Separate from the workplace, the women also suggested fitness facilities with childcare services where the kids can be engaged in activity while they are in the group session. How to maintain your workout routine at home was a tip that all the women wanted as an option because of their busy lifestyle. The women unanimously stated that they wanted to have a support system in place that consisted of social connections with other women who had the same challenges that they had. They wanted to look forward to coming back to their support group.

### **Summary of Results**

Chapter 4 presented the research questions that provided a foundation for this qualitative emergent style study. It also presented the data gathered by the researcher in conducting two separate focus groups with a total of eight African American women in Westchester County, New York. The women provided detailed and illustrative descriptions of their lived experiences as it related to the factors that influence their health promoting behavior. The focus groups provided an environment conducive to discussing pertinent issues related to each women's perceived benefit, barriers, self-efficacy, and interpersonal, and situational influences to health promotion action. The researcher mapped Nola Pender's health promotion model to each of the five categories

to provide a basis for the reader to obtain insight into the factors that affect African American women's ability to engage in health promoting activities.

In focus group A where the women's BMI was under 30, the women had similar characteristics. Although they may face some barriers, they had a basic knowledge and foundation for implementing their exercise routines. The data demonstrated that the women went food shopping and were more likely to shop for fresh food items, prepared meals in advance, and make healthy selection more often. They also engaged in regular exercise routines more often than the women in focus group B. Routine health provider appointments was another area where the women in this group practiced adherence to their doctor's recommendation more often than not.

In focus group B where the women's BMI was 30 or over, the women characteristics were similar when it came to having an extremely busy lifestyle. The demands of their lifestyle interfered with the consistent implementation of health promoting behaviors on most occasions. The data showed this was evident in the areas of advance food planning and preparation, consistently engaging in regular exercise, and going for health screenings on a regular basis. Only Participant 5 demonstrated that she consistently engaged in routine exercise.

Overall, the women demonstrated during their focus group discussions, that they are more educated and knowledgeable about health promoting activities than their parents' generation. They have a better understanding of the cause and effect of culture, family history, lifestyle habits, and the relationship to chronic diseases. This group of women were well versed in their chances of getting a chronic disease as it related to their lifestyle choices. They knew about their susceptibility to disease and were trying to make

the necessary lifestyle changes at different intervals to improve their health. Their challenge is the implementation and their ability to sustain the health promoting activities to benefit their overall health over a long period of time. The factors that interfere are cultural traditions, competing demands on their time, and their own desire and ability to adhere to health promoting activities.

Chapter 5 provides an analysis of the finding and propose recommendations to further the study.

## **Chapter 5: Discussion**

### **Introduction**

This chapter provides a brief summary of the study, explains the implications of the findings, discusses the limitations of the study, provides recommendations, and lastly, concludes with the summary of the study based on the researcher's analysis and results.

Our nation continues to face a crisis due to chronic diseases and conditions, such as heart disease, stroke, cancer, diabetes, and obesity. These diseases and conditions are the most common and costly. In the United States, chronic diseases account for 75% of the \$2 trillion dollars spent on medical treatment (CDC, 2014). Most chronic diseases are preventable with lifestyle changes such as regular exercise, good nutrition, medical screenings, and other preventative health interventions.

African American women continue to suffer from chronic diseases at a disproportionate rate compared to other ethnic groups (CDC, 2014). This has led to a higher severity of disease, mortality, and morbidity rates within the United States within this population of women. Obesity increases the risk that the women may develop one or more chronic conditions. Being obese is linked to chronic diseases because it is the common denominator and is a major risk factor (CDC, 2012). Obesity and related diseases are significantly higher in the African American population (Schub, 2014). This is a public health concern and this health disparity must be addressed. Healthy people 2020 is leading the charge by providing goals and objectives to improve the health for all Americans. One of their goals is to “achieve healthy equity, eliminate disparities, and

improve the health of all groups” (Minority Nurse, 2013, p.1). This study concurs with other researchers, (Barroso et al., 2010; Harrington, 2008; Stanziano & Butler-Ajibade, 2011) which states that ethnic, racial, and cultural factors have been found to influence obesity in the following ways: through genetic predisposition, socioeconomic level, geographic location, through traditional cultural attitudes and beliefs, and by influencing activity level and dietary behaviors.

The researcher has conducted health promotion and health education seminars and programs over the past 12 years. The programs ranged from 1 day seminars to 3 month programs. Although the programs were informative, well-attended, and educational, it was not known whether or not the programs had a long-term positive impact of the lives of the African American women served. There is also not enough data to substantiate if these programs had an overall impact on reducing the chronic disease rates of this population in Westchester County, New York. This was demonstrated via the researcher’s finding that there was a lack of data available to determine if these health promotion programs had a long term impact on improving the lives of the African American women for long-term benefit and to improve their overall health. The purpose of this study was to examine the factors that affect the health promoting behavior and perceptions of eight African American women in a focus group environment and to share this data with other health care professionals and other individuals interested in improving the health status of this population. Pender et al. (2011) stated, health care providers and health educators should have access to the latest research and data in order to assist them to have a positive impact on the health promotion and intervention strategies in African American women.

The researcher used Pender's (Pender et al., 2011) health promotion model as the theoretical starting point for this study. It also provided a theoretical framework to guide the researcher in the data analysis. This method enabled the researcher to gain insight into the needs of African American women as it related engaging and sustaining preventative health practices to reduce their risk of chronic diseases and to promote good health. Using this model and theoretical lens provided a foundation to dissect the factors that influence African American women's health promoting behavior.

The researcher developed the four research questions to examine the factors that affect the health promoting behavior of African American women in Westchester County, New York. The four research questions for this study were:

1. Does culture impact African American women's willingness to adopt a healthy lifestyle?
2. What factors influence African American women's participation in preventative health practices (health promoting behaviors)?
3. What are the factors that influence African American women's motivation towards a healthy lifestyle?
4. What factors influence African American women's participation in preventative health programs?

The following five major factors used by the researcher to conduct the study were: Perceived benefits to health action, perceived barriers to health action, self-efficacy, interpersonal influences, and situational influences. The eight African American women shared their lived experiences pertaining to health promotion in a focus

group setting. The findings of this study concur with the existing literature in that there are numerous barriers to health promotion activities in this population.

### **Implications of Findings**

This study was designed to examine the factors that influence African American women's health promoting behaviors and lifestyle choices such as regular physical activity, eating healthy, routine health screening, and other health-promoting behavior. It was also designed to provide information to help medical providers delivering health care services to this population, additional information of the needs of African American women. The intention of the study is to inform future development of health promotion and disease prevention programs that are culturally sensitive, and assist in the reduction of chronic disease and the high rate of morbidity, and mortality in the African American community. The implications of this study indicate a strong need for health promotion programs that lend long-term support to women in the African American community. The findings from this study confirm what Barnes & Kimbo (2012) stated; there is a need for accessible health promotion and disease prevention programs that take into consideration the cultural perspective of the African American women. This research can be used in the future to assist African American women in their quest toward better health. The women in this study requested support from others, as it is challenging to engage in consistent health promotion activities on their own.

One support system that has a strong presence in the African American community is the church setting. The researcher has partnered with numerous faith-based organizations during her career and as a part of the field experience. She has observed how the church setting is an environment that is conducive to providing the social support

systems indicated by the women in this study. Lumpkins (2013), stated that the church setting is a familiar to the individuals, where there is a certain level of trust with the church members and leaders. The church lends itself as a built-in support system where culturally sensitive health promotion can occur and effectively address health disparities.

In order to effectively address the health disparities that exist in African American women, it is important to understand the factors that affect African American women's health care practices. The examination of the factors that influence women toward engaging in and sustaining preventative health care practices that promote good health is a crucial step towards improving their health status.

This study revealed factors that affected the health promoting behavior of women in this group. Some of these factors stem from the shortcomings of the healthcare system. For instance, White (2011) stated that there is a shortage of primary care physicians who have the same cultural background as African Americans and may not have the cultural sensitivity to effectively communicate and understand their health care needs.

Other factors reported by the women included that they delay health screenings because of cost, family, and work responsibilities. The findings of this study align with Smedley et al. (2003) who stated that health disparities do not only exist because of some failure of the health care systems; women also have the responsibility to practice preventative healthcare. This includes African American women's perception of a health body image. This research study supports the findings of Tucker (2014), where BMI was not a significant direct predictor of motivation to eat healthy. The study suggest that this may be due to the lack of connection between African Americans perception on what constitutes a healthy weight and the current medical definition of overweight/obese. It is



this researcher's intention to bridge the gap in both arenas by using health promotion programs and partnerships with interested stakeholders in the surrounding communities.

The unanticipated finding of food qualities effect on the women making healthy food selections is one that requires further investigation. The women stated how the quality of food has changed over recent decades and in their opinion has, "diminished their options for healthy eating." Perhaps a longitudinal study to examine the type of food selections that are available in different communities and its effects on African American women's ability to eating healthy is called for. In the meantime, it would be helpful for the women, if health professionals can partner with organizations and food manufacturers to provide training programs to educate individuals on food quality, and identify the best places to shop for the healthier, less processed food items, and affordable food options This would help address the women's barriers to eating healthy, balanced, and nutritious meals.

The study's findings support and expand on health promotion theories and research. The findings also add to existing literature and knowledge concerning factors that affect and influence health promoting practice among African American women. In addition, the findings reflect information for health care professionals that are responsible for developing and implementing health promotion programs focused on this population.

### **Limitations**

A health promotion professional conducted the research. Although the women felt comfortable and the focus group conversation was free flowing, at times it appeared as though the women may have tried to impress the researcher and the other women in the group by telling how well they are doing and compared themselves to the other women in

the group. Another limitation was the small sample size of eight which does not allow for the generalization to a larger population. This was a convenience sample and may not represent other African American women within or outside the Westchester County, New York area. Although this study was based on examining African American women, it would be advantageous to the health care field to replicate this study within other cultures.

### **Recommendations**

This study sets the foundation for continued health promotion research of African American women. Based on the research from this study, the researcher makes the following recommendations for increased support systems, use of online technology, training for medical providers, and culturally relevant health promotion initiatives.

**Support systems (support groups).** As the women in the study recommended, organize and implement culturally sensitive support groups for African American women. They also mentioned that they would feel most comfortable with other women that were in the same situation. They were referring to lifestyle and having children. It is recommended that women attend health promotion sessions that are offered in their child's school that are related to nutrition, exercise, cooking, eating healthy, and other health promotion activities. In addition, the support groups should be culturally based because this is the foundation upon which the African American community is built. Within cultural and family settings, the women experienced the most barriers to their successful implementation of health promoting behaviors. Therefore, this would be the ideal place to have the most impact. The women will be positively influenced by health professionals while still honoring their cultural heritage and learning how to improve

their lives. The women from the study demonstrated that they were knowledgeable about the basic healthy living activities, however, they requested the help of others in a support group forum. This recommendation is supported by the initiative of the Healthy People 2020 initiative, where the goal is not to teach but rather to mentor those who do not have the tools to make better choices about their health (Minority Nurse, 2013). As discussed in the literature review, health coaches and community health workers can be accountability partners who provide the necessary health education, guidance, motivation for the women, and support them in their health promotion efforts.

**Online technology (social media and email).** As with so many people in society today, the African American women in this study have busy lifestyles. There have to be new and innovative ways to provide support and education for women in an effort to improve their chances of being successful as it relates to improving their health promoting behaviors. The women in the study recommended tips for exercising and preparing healthy meals at home because of their lack of time. E-mailing via the Internet or the use of social media to provide a forum for the women to communicate with other women and health care providers, and engage in health promotion opportunities would be helpful. Marcus et al. (2006), stated Internet-based physical activity intervention represents a potential high-reach, low-cost method to promote physical activity.

**Medical provider training - culturally and linguistically appropriate services (CLAS).** This researcher concurs with Pender et al. (2011) who stated health care providers and health educators should have access to the latest research and data in order to assist them in having a positive impact on culturally sensitive and appropriate health promotion and intervention strategies in African American women. As a part of

providing health care services to African American women, health providers and health educators who have received CLAS training would be in the best position to deliver culturally sensitive information and services by educating and providing the women with strategies for healthy living. Hospitals and health care settings should have racially diverse medical and health professionals who can deliver culturally sensitive information to their patients. It is important for the patient to be comfortable in sharing information and to be understood by their doctor and other medical professionals.

**Health promotion initiatives.** Culturally relevant health promotion and education activities and programs are one way to address health care disparities and lower chronic disease in this population (Smedley et al., 2003). Webb and Gonzalez (2006) imply that health promotion activities that are community-based and target the African American population, should include public health education sessions in familiar community sites such as community centers, churches, schools, and hospital settings that are accessible to the target population. Church-based health promotion interventions and programs have shown to significantly impact several health behaviors among African Americans (Campbell et al., 2007).

## **Conclusion**

The data revealed many barriers the women faced as they attempted to lead a healthy lifestyle. The women discussed their lived experiences including their challenges and successes with regard to living a healthy lifestyle. The data indicated that when the women have several support systems in place it would reduce the barriers that present challenges to the women. In addition to support systems, the women expressed their strong desire to be healthy; they felt they could be successful at living a healthy life.

This study has provided the African American women's perspective to the motivators and barriers to health promoting behavior. The researcher has provided recommendations as a foundation to implement future health care interventions and health promotion programs that will address the health improvement of African American women. The findings of this study indicate that support systems should be developed in conjunction with culturally appropriate health care intervention and health promotion programs. The programs should be used to educate and motivate African American women to eat nutritious and well balanced meals, increase physical activities, increase the consumption of fruits and vegetables, and take advantage of regular health screening with their health professionals. These are some of the basic steps necessary to address the health care needs within this population and reduce their risk to chronic diseases.

This study confirmed what this researcher suspected from her years in the health promotion field with this segment of the population. This population has numerous perceived barriers that become obstacles to obtaining optimal health. Once these barriers are proactively addressed, the women will have a better opportunity to improve their health status. In addition, to address the barriers to health promotion, further investigation is needed to address the impact of interpersonal and situational influences.

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Appendix A

**Pre-Focus Group Questionnaire**

Respondent # \_\_\_\_\_ Data Collection Location: \_\_\_\_\_ Today's Date: \_\_\_\_\_  
Respondent's First Name Only: \_\_\_\_\_  
Respondent's Email Address- Please PRINT CLEARLY: \_\_\_\_\_

Please give your best estimate in your responses by filling in the circle next to your answer. Mark all that apply. Please do not write your name on the form. Thank you.

---

1. **Do you consider yourself to be an African American Woman? Please circle your answer.**

Yes  
No

2. **What is your Age? Please circle your answer.**

18-21  
22-24  
25-29  
30-39  
40-45  
46-49  
50 or over

**PLEASE PRINT YOUR ANSWER CLEARLY**

3. **Enter your current height and weight in the designated area:**

HEIGHT: \_\_\_\_\_ WEIGHT: \_\_\_\_\_

4. **Name the city or town you live in New**

**York:** \_\_\_\_\_

5. **What is your marital status? PLEASE CIRCLE ALL THAT APPLY.**

Married  
Widowed  
Living with Partner  
Divorced  
Separated  
Not Married

6. **What best represents the years of schooling you have completed? Please circle your answer**

Elementary  
Junior High School  
High School  
College  
Graduate School  
Master's Degree  
Professional Degree  
Doctorate

---

**Consent**

I have been informed about this research study on African American women and health promotion activities. The details of the study have been explained to me. I agree to be contacted to participate in a focus group discussion on the factors that influence African American women and their health activities if I am selected.

---

**Respondent's Signature**

**Date**



## Appendix B

### Research Questions and Focus Group Questions

Research Questions	Focus Group Questions
<p>1. Does culture impact African American women’s willingness to adopt a healthy lifestyle?</p>	<p>1. Is having good health important to you? Please explain your answer.</p> <p>2. What role does your culture/up bring/family health history have on your adherence to health promoting activities?</p>
<p>2. What factors influence African American Women’s participation in preventative health practices (health promoting behaviors)?</p> <p>3. What factors influence African American Women’s motivation towards a healthy lifestyle?</p>	<p>3. What factors contribute to:</p> <ul style="list-style-type: none"> <li>a. Implementation adherence of regular exercise? (CDC recommendations)</li> <li>b. Implementation adherence of eating a balanced and nutritious diet? (CDC)</li> <li>c. Routine health care provider visits for recommended health screenings?</li> </ul> <p>4. What role does your health history play in the adherence of the recommended health promoting activities?</p>
<p>4. What factors influence African American women’s participation in preventative health programs?</p>	<p>5. If you have participated in health promotion programs have they helped you? Please explain your answer.</p> <p>6. If you could give advice to the developers of future health promotion programs what components would you like to have in the program that would help you improve your health?</p>

## Appendix C

### INFORMED CONSENT FORM

**Title of study:** An Examination of the Health Promoting Behavior of African American Women

**Name of Researcher:** Donna J. Thomas      **Phone for Further Information:**

**Faculty Supervisor:** Dr. Janice Girardi

**Purpose of study:** The purpose of this study is to examine the factors that influence health promotion behavior of African American women.

**Place of Study:** White Plains Youth Bureau, Westchester County, New York

**Length of Participation:** Approximately two hours participation in focus group and follow-up meeting.

**Risk and benefits:** The expected risks and benefits of participation in this study are explained below:

The knowledge gained from your participation in this study will have the potential of assisting in the develop of health promotion interventions for the African American population. The study is expected to specifically benefit African American women. This study may involve some risks or discomfort to participants. Risk of participation might include some emotional discomfort. Possible emotions that you may experience include, but are not limited to: anxiety or embarrassment should you perceive yourself as not following good health practices, or failing to meet established guidelines. You should report any difficulty/challenges you may encounter as you participate in the study to the researcher.

**Method for protecting confidentially/privacy:** Please do not write your name on any of the questionnaires. Once the consent is completed, it will be removed and store separately from the remaining study materials. All document have an identification code as the method of keeping the information provided together. All data is only accessible to the primary investigator and will be kept in a locked safe at the investigator's home. By signing this consent, you authorize the Investigator to access your study information as may be necessary for purposes of this study. The investigator will consider your records confidential to the extent permitted by law.

**Your rights:** As a research participant, you have the right to:

1. Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate.
2. Withdraw from participation at any time without penalty.
3. Refuse to answer a particular question without penalty.
4. Be informed of appropriate alternative procedures of courses of treatment, if any, that might be advantageous to you.
5. Be informed of the results of the study.

I have read the above, received a copy of this form, and I agree to participate in the above-named study.

\_\_\_\_\_  
Print name (Participant)                      Signature                      Date

\_\_\_\_\_  
Print name (Investigator)                      Signature                      Date

If you have any further questions regarding this study, please contact the researcher listed above. If you experience emotional or physical discomfort due to participation in this study, please contact the Office of Academic Affairs at 385-8034 or the Health & Wellness Center at 385-8280 for appropriate referrals.

The Institutional Review Board (IRB) of St. John Fisher College has reviewed this project. For any concerns regarding confidentiality, please call Jill Rathbun. She will direct your call to a member of the IRB at St. John Fisher College.