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# Factors That Influence Physical Activity Among African American Mothers at Recreation Centers

Nichole Leigh Glover  
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# Walden University

College of Health Sciences

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Nichole L. Glover

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Walden University  
2019

Abstract

Factors That Influence Physical Activity Among African American  
Mothers at Recreation Centers

by

Nichole L. Glover

MPH, Emory University, 1998

BA, Hamilton College, 1993

Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Philosophy  
Public Health

Walden University

May 2019

## Abstract

Physical activity is a critical factor in preventing obesity and other chronic illnesses. African American women experience higher rates of physical inactivity than the general population. As a key figure in the family, African American mothers should model healthy behaviors to the family, especially their children. This qualitative study explored the physical activity attitudes of African American mothers who frequently visit a recreation center in the Columbus, Ohio, area. The research questions focused on the possible barriers and motivators for physical activity engagement. The theory of planned behavior, which emphasizes behaviors, intentions, and attitudes when exploring health behaviors, guided the study. Purposeful sampling was applied to recruit a sample of 17 African American mothers over the age of 18 from 5 recreation centers. Participants who met inclusion criteria participated in a semi-structured one-on-one interview. Data were analyzed by hand coding and NVivo to capture and analyze themes, including (a) physical movement, (b) physical health, (c) environment, (d) schedule, (e) physical appearance, and (f) well-being. The findings indicated that African American mothers are aware of the value of physical activity for themselves and their families. However, personal responsibilities may prevent them from engaging in regular physical activity. The study contributes to social change by providing community center directors and public health professionals with information that they can use to create more culturally sensitive physical activity interventions.

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## Dedication

I dedicate this research to my heavenly Father, whose strength enabled me to endure this process and accomplish a major life goal. I also dedicate this research to my daughter Raven who has graciously shared her mother for the past eight years; my mother, Margaret Bowman, who has been one of my biggest prayer warriors throughout my dissertation journey; brother, Michael Bowman; late father, Kenneth L. Bowman; late grandfather, Oscar Hagood; a host of close friends; Columbus State Community College colleagues; and late co-worker, Dr. Chandra Bell who always encouraged me to keep pushing with my doctoral work, The unwavering support of the individuals around me was a motivating force to keep going when I got weary. I am forever grateful for my tribe.

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## Table of Contents

List of Tables .....	v
List of Figures.....	vi
Chapter 1: Introduction to the Study.....	1
Introduction.....	1
Background.....	2
Problem Statement.....	4
Purpose of the Study.....	5
Research Questions.....	6
Theoretical Framework.....	6
Nature of the Study.....	8
Definitions.....	9
Assumptions.....	10
Scope and Delimitations.....	10
Limitations.....	11
Significance.....	12
Summary.....	12
Chapter 2: Literature Review.....	14
Introduction.....	14
Literature Search Strategy.....	15
Theoretical Framework.....	16
Obesity and Obesity-Related Diseases in the United States.....	17



Physical Activity in the United States .....	20
Physical Activity for African American Women.....	21
Physical Activity Motivators .....	23
Physical Activity Barriers.....	24
Community Recreation Centers.....	25
Intergenerational Transmission.....	26
Summary.....	27
Chapter 3 Research Methods .....	29
Introduction.....	29
Research Design and Rationale .....	29
Role of Researcher .....	31
Methodology.....	31
Participant Selection Logic.....	31
Instrumentation .....	32
Procedures for Recruitment, Participation, and Data Collection.....	33
Data Analysis Plan.....	34
Issues of Trustworthiness.....	34
Credibility .....	35
Transferability.....	35
Dependability.....	36
Confirmability.....	36
Ethical Procedures .....	36

Summary .....	37
Chapter 4: Results .....	39
Introduction .....	39
Pilot Study .....	40
Setting .....	40
Demographics .....	41
Data Collection .....	43
Participant Selection .....	44
Data Analysis .....	44
Themes .....	45
Results .....	45
Research Question 1 .....	45
Research Question 2 .....	51
Research Question 3 .....	53
Evidence of Trustworthiness .....	56
Credibility .....	56
Transferability .....	56
Dependability .....	57
Confirmability .....	57
Summary .....	57
Chapter 5: Discussion, Conclusions, and Recommendations .....	59
Introduction .....	59

Interpretation of the Findings.....	59
Theme 1: Physical Activity.....	60
Theme 2: Physical Health.....	61
Theme 3: Environment.....	62
Theme 4: Schedule.....	63
Theme 5: Physical Appearance.....	63
Theme 6: Well-Being.....	64
Limitations of the Study.....	66
Significance of Findings and Social Change Implications.....	66
Recommendations.....	68
Recommendations for Future Research.....	69
Recommendations for Practice and Policy.....	69
Dissemination of Research Findings.....	71
Conclusions.....	72
References.....	73
Appendix A. Interview Questions.....	94
Appendix B. Interview Protocol.....	95
Appendix C. Confidentiality Agreement for Research Participants.....	96

List of Tables

Table 1. Demographic Information..... 42

## List of Figures

Figure 1. Theory of reasoned action and planned behavior.....	7
Figure 2. Map illustrating areas for recreation centers. ....	41

## Chapter 1: Introduction to the Study

### **Introduction**

Obesity is a global public health issue both because of its association with other serious health conditions and its prevalence (Reiner, Niermann, Jakauc, & Woll, 2013). Although obesity is a complex condition with many contributing factors, individuals can control and improve several of these factors, such as lifestyle and level of physical activity. In fact, physical activity is an important factor in preventing not only obesity but also other chronic illnesses (Loprinzi, Cardinal, Loprinzi, & Lee, 2012; Reiner et al., 2013). However, many adults and children do not get enough physical activity to maintain proper health (Hallal et al., 2012). Another important factor to consider is how different populations adopt healthy behaviors or make health behavior changes. Obesity and other chronic illnesses disproportionately affect racial and ethnic groups (Peterson, 2011). African Americans in particular experience higher rates of obesity and physical inactivity (Carter-Parker, Edwards, & McCleary-Jones, 2012; National Center for Health Statistics, 2012; Versey, 2014).

This qualitative study used individual interviews to identify the attitudes of African American mothers who visit recreation centers concerning engaging or not engaging in physical activity. The study examined the factors that influenced these mothers' decisions about whether to engage in physical activity. Previous physical activity research has focused on the African American population or African American women (Peterson, 2011; Ray, 2014; Siceloff, Coulon & Wilson, 2014; Versey, 2014). To date, African American mothers, who play a significant role in the family, have not been

the focus of physical activity studies (Im et al., 2012). African American mothers' role in the family is highly valued, and they are considered the strength of the family (Hines & Boyd-Franklin, 2005), which is why understanding their physical activity attitudes is essential.

### **Background**

Obesity is a major health issue for African American adults and children, and it is a major cause of morbidity and mortality (Flegal, Carroll, Kit, & Ogden, 2012).

Researchers from the World Health Organization classified obesity, cardiovascular heart disease, and type 2 diabetes as the most severe noncommunicable diseases (Reiner et al., 2013). African American adults have the highest age-adjusted rate of obesity at 47.8% compared to the general population rate at 32.6% (Ogden, Carroll, Kit, & Flegal, 2014). African American youth have a higher rate of obesity at 20.2% compared to European American youth at 14.1% (Centers for Disease Control and Prevention [CDC], 2011a). An unhealthy lifestyle, which includes a poor diet and physical inactivity, is a major risk factor for these diseases.

According to population surveys, most adults and children do not meet the guidelines for recommended physical activity (Cogbill, Sanders, Thompson, & Deshpande, 2011). Physical inactivity contributes to noncommunicable diseases (Bauman et al., 2012). According to the CDC (2012), approximately 21% of adults are not likely to meet the recommended amount of daily physical activity.

Ohio is among the worst states in the country for health outcomes; Ohio falls short of meeting the recommended national physical activity guidelines (United Health

Foundation, 2012). In the CDC's (2012) state-specific report, 24% of Ohio adults reported no physical activity within the past month compared to Colorado, which has the best rate in the country at 16.5%. In 2008, the Ohio Department of Health (2009) and several community organizations and agencies launched an Ohio physical activity plan that focused on communities, schools, transportation, and worksites.

Lack of physical activity is more of an issue for minority groups (CDC, 2011b). Minority children, in particular, are less likely to reach the recommended amount of physical activity (Basch, 2011). African American mothers have the responsibility to ensure that they model healthy behaviors for their children (Webber & Loescher, 2013). Davison, Li, Baskin, Cox, and Affuso (2011) reported a positive association between children's physical activity and their parents' physical activity.

Based on this evidence, more information is needed as to why African American mothers are physically inactive. The current research is limited regarding African American mothers' attitudes toward physical activity. To address the issue, it is necessary to understand the attitudes that influence these mothers' decisions about engaging in physical activity. Siddiqi, Tiro, and Shuval (2011) found such issues as safe neighborhoods, access to an affordable recreational facility, time, finances, and others as reasons why some African American women did not engage in physical activity. However, some vulnerable African American populations do have access to community recreation centers and yet still do not engage in physical activity (Lee, MacFarlane, & Cerin, 2013).



Recreation centers are a valuable public resource that offers a variety of community-based programs to promote healthy families (Stodolska, Shinew, & Li, 2010). These programs address issues from early childhood development through elder services. To support a healthy lifestyle, recreation centers offer physical activity opportunities that are close to home, affordable, and amenable to various ages (Casper, Harrolle, & Kelley, 2013). Despite having access to recreation centers that provide fitness opportunities and resources, African American mothers may continue to be physically inactive. Hence this research may help to develop a greater understanding of why some African American mothers are physically active or inactive, thereby contributing to evidence-based interventions to reduce their risk for some diseases.

### **Problem Statement**

African American mothers are a particularly vulnerable population because barriers to physical activity are more prevalent among them than among other women in the general population who are not mothers (Fox, Mann, Ramos, Kleinman, & Horowitz, 2012). Also, mothers are not only confronted with maintaining their own health, but with modeling healthy behaviors to their families (Elder et al., 2013; Tucker, Zandvort, Burke, & Irwin, 2011). Some studies indicate that the health condition and physical activity of mothers are possible factors that influence children's health behavior (Didericksen & Berge, 2015; Faith et al., 2012; Grossklaus & Marvicsin, 2014; Hooper et al., 2014; Wilson & Spink, 2012). Thus, the possibility for intergenerational transmission of poor health, vis-à-vis physical inactivity and other obesity-related behaviors, suggests a critical

need for research that identifies the attitudes, barriers, and motivators of African American mothers regarding physical activity.

Previous research on barriers to physical activity among African American women, especially in disadvantaged communities, has identified a lack of comfortable spaces for exercise in communities with high concentrations of minorities (Fox et al., 2012). Some of these areas have community recreation centers, which provide a safe, affordable community space for physical activity. Therefore, these centers offer opportunities to address African American mothers' physical activity needs. Although some African American mothers, who frequent recreation centers, have unrestricted access to fitness classes and/or fitness equipment, they still do not engage in physical activity (Lee et al., 2013). Limited research on this phenomenon exists.

### **Purpose of the Study**

The purpose of this phenomenological qualitative study was to explore the physical activity attitudes of African American mothers who frequently visit a recreation center in the Columbus, Ohio, area. The study sought to highlight the factors that shape physical activity attitudes of African American mothers and determine whether they actually participate in some type of fitness activity. A phenomenological design was appropriate for this study because I ascertained the attitudes of participants who share a lived experience and have access to safe, affordable fitness opportunities. The study provides information that could help develop more targeted physical activity interventions through recreation centers to African American mothers.

### **Research Questions**

The following questions guided the study:

RQ1. What are the attitudes of African American mothers who visit recreation centers about engaging in physical activity?

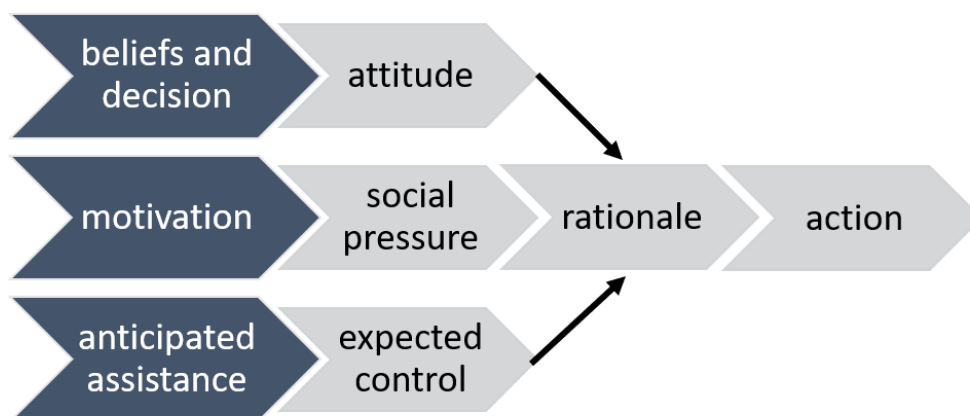
RQ2. What are the factors that influence the attitudes and decisions of African American mothers who visit recreation centers not to engage in physical activity?

RQ3. What are the factors for African American mothers who visit recreation centers that influence their decision to engage in physical activity as a model for their children?

### **Theoretical Framework**

The theoretical framework for this study was the theory of planned behavior (TPB). TPB is an extension of the theory of reasoned action (TRA) where the central theme is a person's intention to perform a particular behavior, which is influenced by the attitude toward the behavior and the subjective norms regarding it (Ajzen, 1991; Montano & Kasprzyk, 2008). TPB is defined as the behavioral intentions that drive behavior, and these intentions are directed by the attitude toward performing the behavior, the subjective norms associated with the behavior, and the perceived control over the behavior (Ajzen, 1991; Gulley & Boggs, 2014; Montano & Kasprzyk, 2008). TPB has been used in studies to predict and understand a variety of health behaviors (Khandelwal & Gupta, 2014; McEachan, Conner, Taylor, & Lawton, 2011; Montano & Kasprzyk, 2008; Sun, Acheampong, Lin, & Pun, 2015).

TPB is an expansion of TRA by adding the construct of perceived control (Montano & Kasprzyk, 2008). Examining the attitudes toward the behavior and the subjective norms associated with the behavior is not enough; researchers must also take into account the individual's complete volitional control over the behavior (Montano & Kasprzyk, 2008). Ajzen (1991) included perceived control because it can be an accurate assessment of definite control over the behavior (see Figure 1). TPB has been used to explore if an individual's perceived control is a determinant of behavioral intention as well as attitudes and subjective norms (Montano & Kasprzyk, 2008).



*Figure 1.* Theory of reasoned action and planned behavior. Adapted from “Application of the Theory of Planned Behavior to Leisure Choice.” by I. Ajzen and B. L. Driver, 1992, *Journal of Leisure Research* 24, p. 210. Copyright 2001 by Journal of Leisure Research.

I used TPB as the framework for this study because of this theory's usefulness in understanding and predicting physical activity behaviors (Gulley & Boggs, 2014; Lee, 2011). An individual's attitude, environment, and perceived control over a behavior influence their health decisions (Ajzen, 1991). TPB was useful in exploring the context of the health behavior decision-making process for African American mothers who visit

recreation centers. TPB was relevant in examining the factors surrounding the decision of whether to engage in physical activity.

In addition, this theory provided a framework that may help further reveal the factors that influence the attitudes that can inhibit or motivate physical activity participation in this population of African American mothers. The theory lends itself to exploring population-specific factors that can influence attitudes. Through the personal interviews, I explored the factors that influenced participants' intentions to engage in physical activity as well as their attitudes that influenced their decision about engaging in physical activity.

### **Nature of the Study**

The research design for this study was qualitative, as this method of research would help gain a more comprehensive understanding of the factors that influenced physical activity behaviors among African American mothers who visit recreation centers. Qualitative research illuminates individuals' experiences, thereby providing a deeper understanding of those experiences (Patton, 1990). Qualitative research has proven to be a more effective method than quantitative research in examining individuals' attitudes, beliefs, and experiences with various types of behavior (Kaplan & Maxwell, 2005). This study design allowed for a deeper exploration into this population's attitudes toward engaging in physical activity.

I used personal interviews to explore the attitudes toward physical activity among African American mothers who visit recreation centers. The interviews provided a more in-depth examination of the factors that influence the attitudes and ultimately the decision

to engage or not engage in physical activity. The recreation centers provide space and opportunities for physical activity, but some African American mothers still choose not to engage in physical activity.

I used a phenomenological approach to gather the data. By using a phenomenological approach, I examined the participants' attitudes and experiences together to explore the context for their physical activity decisions. This particular research approach provided rich data because the public can see the world through the eyes of the research participant. A qualitative phenomenological study helps the researcher to interpret phenomena in terms of the meanings people give to them (Denzin & Lincoln, 2011). In this particular study, the phenomenon was physical activity.

### **Definitions**

The following terms are defined as used in this research:

*Community recreation center:* A community recreation center is a public space available for the purpose of providing activities and/or experiences that help in maintaining a balance in life in order to live to someone's full potential (Landes, 2004).

*Obesity:* Obesity is defined as a body mass index (BMI) at or above the 95th percentile for children and teens of the same age (CDC, 2011a) or a BMI of 30.0 or higher for adults (CDC, 2011a).

*Physical activity:* Physical activity and exercise are interchangeable terms. Physical activity is bodily movement by skeletal muscles that produces energy expenditure (National Institutes of Health, 2016).

### **Assumptions**

I made the following assumptions in this phenomenological study. I assumed that a qualitative research design would highlight African American mothers' lived experiences with physical activity. I assumed that African American mothers would openly discuss their physical activity behaviors. I assumed that the participants would understand my questions so that they could adequately respond. I assumed that all participants would be open and honest and would share their experiences with no fear of consequences. I also assumed that my sample was adequate and that data collection reached the principle of saturation. Finally, I assumed that my study procedures would yield valid results.

### **Scope and Delimitations**

The scope of the study was African American mothers who visited a Columbus recreation center. All participants spoke and read English fluently. I selected a purposeful sample of 17 African American mothers from five Columbus recreation centers. The selected participants were not pregnant with a first child and were over the age of 18. They had visited a recreation center at least three times in the previous month. I recruited them through flyers posted at the selected recreation centers. I instructed interested women to contact me by phone or e-mail if interested in participating in the study.

I excluded non-African American mothers in the city of Columbus, Ohio. Because of time constraints, the focus was on Columbus, Ohio. I selected a qualitative research design so that I would have the opportunity to interact with the participants and probe deeply into the phenomenon.

### **Limitations**

A limitation of the research was the qualitative research design and purposeful sampling. These methods make it difficult to generalize to other populations (Kafle, 2011). Also, the one-time personal interview with no longitudinal follow-up could only capture participants' attitudes at one specific time as it was self-reported. I addressed the trustworthiness of this research by ensuring the authenticity, credibility, dependability and transferability of the findings.

Another limitation was that I was the only person to collect and analyze the data. The interaction between the researcher and the participant can cause bias as there is a concern about the researcher's presence influencing the participants' responses (Hewitt, 2007). To avoid a potential bias from my personal experience as an African American mother, I kept self-reflection notes and bracketed to avoid influencing data collection and analysis. Bracketing is process of putting aside one's own personal beliefs to actively listen to the experiences of the participants (Carpenter, 2007). Bracketing is a way to demonstrate the validity of data collection and analysis (Ahern, 1999). It can be difficult for participants to share personal feelings about sensitive topics. I worked with site directors to set up my recruitment strategy and plan ways to make participants feel comfortable. I worked in a few of the recreation centers, which assisted in my establishing a presence in some of the centers. To avoid personal bias, I did not interview any mother with whom I had a personal relationship.



### **Significance**

Because of the lack of understanding about why African American mothers may choose not to use the fitness options available to them through the recreation centers, this research provided some insight. I hope that this research will provide more information as to why African American mothers may choose not to use the fitness options available to them through the recreation centers. The social change implications for this study are a deeper understanding of the attitudes, motivators, and barriers to engaging in physical activity among African American mothers at recreation centers. Understanding these issues will assist public health professionals, recreation center personnel, community leaders, and other key stakeholders with creating more effective targeted physical activity interventions for African American mothers who use recreation centers. Public health professionals can use the research findings to initiate discussion in various communities about how to work with African American mothers around lifestyle changes that offer ways to be more physically active. Given the prevalence of obesity, a need exists to address obesity and obesity-related diseases in a more multidimensional manner.

### **Summary**

Obesity is a growing issue that affects minority groups at a disproportionate rate. Multiple factors, such as diet, physical activity, and environment, contribute to the risk of obesity. African American mothers face many challenges in maintaining their health and modeling healthy behaviors to their families. Mothers' attitudes toward physical activity behaviors can play a key role in how their families engage in physical activity.

Chapter 2 provides an in-depth review of the literature to help understand the relevance of how mothers' attitudes toward physical activity behaviors can influence their decision to engage or not engage in physical activity. Chapter 3 includes the research design, methodology, and data analysis.

## Chapter 2: Literature Review

### **Introduction**

In this chapter, I provide a review of literature pertaining to the factors that influence African American mothers who visit recreation centers as to their decision whether to engage in physical activity. Lack of physical activity is an important risk factor for obesity and obesity-related diseases. As earlier mentioned, this particular population fails to meet the recommended physical activity levels, which puts them at a greater risk for disease.

I conducted a review of studies on African American women and physical activity because the literature is limited regarding African American mothers. The literature examines nutrition behaviors and physical activity support for children (Davison et al., 2011). Much of the research that focuses on African American women regarding physical activity is outdated and quantitative (August & Sorkin, 2010; Gletsu & Tovin, 2010; Mama et al., 2011). These studies focused on beliefs, barriers, and frequency of activity. A need exists for qualitative research that explores the factors that influence African American mothers' attitudes about engaging in physical activity.

My goal with this study was to identify factors that influence physical activity engagement for African American mothers. As health disparities continue to increase, especially for the African American community, it is critical for public health professionals to be diligent in researching the various factors that affect health behaviors. The findings may provide information to assist in the creation of more effective physical activity interventions. The literature analysis is divided into sections that describe the

theoretical framework, overall obesity health impact, physical activity, physical activity motivators, physical activity barriers, community center resources, and intergenerational transmission.

Researchers have examined physical activity within the broader African American population and more specifically for African American women. However, the research is limited for African American mothers' physical activity engagement, specifically, qualitative studies that explore motivators and barriers to physical activity. This chapter provides a synthesis of literature that offers a background for physical inactivity for African American mothers.

### **Literature Search Strategy**

The major topics covered in this chapter include obesity and obesity-related diseases in the United States, physical activity in the United States, physical activity perceptions, motivators, barriers, community recreation centers, intergenerational transmission, and TPB. The key words used in the literature search for this study included *obesity, physical activity, physical activity perceptions, physical activity motivators, physical activity barriers, exercise, African Americans, African American women, African American mothers, mothers, intergenerational transmission, recreation centers, attitudes, TRA/TPB, TPB and exercise, and TPB and physical activity*. The databases used for the search included PsycINFO, CINAHL, NIH/NIM, MEDLINE, Thoreau, PubMed, EBSCO, ProQuest, Embase, and Joanna Briggs. The research studies that met the criteria and were published in a peer-reviewed journal between 2011 and 2015 are included. The key concepts include obesity, obesity-related diseases, physical activity,

physical activity barriers, intergenerational transmission and community recreation centers, and the theoretical framework.

### **Theoretical Framework**

I used the TPB for this study because this theory has proven to be useful in examining the attitudes toward particular health behaviors (Gulley & Boggs, 2014; Prapavessis, Gaston, & DeJesus, 2015; Zoellner et al., 2012). TPB is an extension of the TRA, which proposes that the best predictor of behavior is behavioral intention, which is determined by attitude toward the behavior, social normative perceptions of it, and perceived control over performance of behavior (Montano & Kasprzyk, 2008).

TRA and TPB focus on individual motivational factors as the determinants of the likelihood of performing a specific behavior (Montano & Kasprzyk, 2008). The operationalization of the TPB theoretical constructs originates from a history of attitude measurement theory rooted in the concept that an attitude toward an action is determined by expectations or beliefs concerning attributes of action and evaluation of attributes (Montano & Kasprzyk, 2008). An individual's beliefs about the outcomes of performing a behavior determine the attitude toward that behavior (Plotnikoff, Lubans, Penfold, & Courtney, 2014). TPB proposes that an individual's intention to perform a behavior is the primary determinant of behavior, because it reflects the individual's level of motivation to perform it (Plotnikoff et al., 2014).

In examining the physical activity attitudes of African American mothers who visit community recreation centers, it is essential to apply a framework that will allow factors specific to this population to surface. The underlying beliefs for a particular

behavior can be different for different populations. The researcher can develop measures of attitudes, perceived norms, self-efficacy, and perceived control, but these measures may not identify the correct beliefs relevant to the behavior or population (Fishbein, 2000; Fishbein & Cappella, 2006). It is important to allow members of the population to identify for themselves the attitudes associated with the behavior.

Researchers have applied different theoretical frameworks in physical activity and attitudes. Major theories applied to physical activity include social cognitive theory (Bandura, 1997), the TPB (Ajzen, 1991), and protection motivation theory (Maddux & Rogers, 1983). TPB has proven to be a stronger theory in application because it allows for investigation of the underlying beliefs that determine a person's attitude, which, in turn, influences the behavior decision (Ajzen, 1991). The results of various meta-analyses support a strong relationship between intention and physical activity as well as attitude and intention (Boudreau & Godin, 2014; Downs & Hausenblas, 2005; Trinh, Plotnikoff, Rhodes, North, & Courneya, 2012). TPB is useful in understanding physical activity among children and adults (Gulley & Boggs, 2014).

### **Obesity and Obesity-Related Diseases in the United States**

Obesity prevalence in the United States has increased since 1960 (Freedman, 2011). It is a national epidemic. Approximately 67% of adults in the United States are overweight or obese (McCarthy, 2014; Saunders, Watson, & Tak, 2012), and 17% of children are overweight or obese (Flegal et al., 2012). Studies link obesity to quality of life impairments, which includes physical, psychological, and emotional (Haboush, Phebus, Ashby, Zaikina-Montgomery, & Kindig, 2011; Reily & Kelly, 2011). The

situation is so disturbing that obesity is predicted to shorten life expectancy of the average American 2 to 5 years by the middle of the century (Rahman, Cushing, & Jackson, 2011). A variety of risk factors contribute to obesity with an unhealthy lifestyle being an important factor. Significant differences in prevalence exist among the different racial/ethnic groups as well as gender groups.

Adult obesity is rooted in childhood obesity (Crossman, Sullivan, & Benin, 2006; Ward et al., 2017). Childhood obesity has increased. Excessive weight among adolescents in the United States has increased over the past 25 years. Not only has there been an increase, but another 15% fall in 85th-95th percentiles, which puts them at a higher risk for adult obesity (Ogden, Flegal, Carroll, & Johnson, 2002). The excessive weight puts them at risk for developing serious health issues such as diabetes, asthma, and other health problems. These alarming statistics demonstrate a need to examine the social etiology of the factors that influence obesity in young people under 18 years old to reverse the health crisis. Ohio ranks 11th for adult obesity in the nation and sixth for children ages 10-17. The obesity rate has increased since 1990 (Ohio Department of Health, 2019), and public health professionals are concerned about the impact that obesity has on overall health. Obesity is associated with several chronic health issues such as diabetes, heart disease, cancer, and hypertension (Popkin, Adair, & Ng, 2012). It is noted as the second leading cause of preventable death (Siahpush et al., 2013). These comorbidities are directly associated with quality of life. It is predicted that the overweight/obese numbers are going to increase (Mama et al., 2011). In light of the obesity focus in recent health efforts, trend surveillance is important (Ogden et al., 2014).

Saunders et al. (2012) noted that race and gender are two strong predictors of obesity. African Americans are at a greater risk of being overweight or obese and developing chronic illnesses as a result of lifestyle factors than is the general population (Conn & Sells, 2016; Hales, Carroll, Fryar, & Ogden, 2017; Lynch & Kane, 2014). As mentioned, the prevalence of child and adolescent obesity for African Americans is much higher than for the general population. The data have shown a deterioration in African Americans' health in particular disease categories (Knox-Kazmierczuk & Shockly-Smith, 2017). They are disproportionately affected by obesity, and National Health and Nutrition Examination Survey data show a steady increase in obesity prevalence for African American women (CDC, 2011b). The fact that obesity is increasing makes it a public health priority (Papoutsis, Drichoutis, & Nayga, 2013). Thus, the fact that African American women and their children are at a greater risk highlights the need to gain a clearer understanding of the factors that contribute to the issue. It is critical to understand the basis of this inequality.

Many African American women are aware of the consequences of being obese but still engage in unhealthy lifestyle behaviors (Blixen, Sing, & Thacker, 2006; Dlugonski, Martin, Mailey, & Pineda, 2017). The knowledge of risk factors, such as a healthy diet and physical activity, does not always translate into healthy behaviors. Although this population may have access to healthy foods and physical activity outlets, obesity and obesity-related disease continue to increase (McKenzie, Moody, Carlson, Lopez, & Elder, 2013). Health inequities are known to continue through generations,



which supports further investigation as to why obesity is increasing in the African American community.

### **Physical Activity in the United States**

Regular physical activity is essential to living a healthy lifestyle. The health benefits from physical activity outweigh the health conditions associated with not being physically active. Individuals who participate in the recommended amounts of physical activity can minimize the physiological effects of an inactive lifestyle and increase life expectancy (Sebastiao, Chodzko, & Schwingel, 2015).

Physical inactivity is associated with premature death, disability, and numerous chronic illnesses (Siceloff, Coulon, & Wilson, 2014; Siddiqi et al., 2011). These conditions generally develop over a long period of time and progress slowly (Reiner et al., 2013). More specifically, physical inactivity over a long time is an unhealthy modifiable lifestyle behavior (Reiner et al., 2013). Regular physical activity improves aerobic capacity, agility, muscular strength, coordination, metabolic functioning, and immune function. (U.S. Department of Health and Human Services, 2016). Evidence abounds that physical activity is a serious factor in the primary and secondary prevention of numerous chronic health issues as well as overall health improvement (Casiro, Rhodes, Naylor, & McKay, 2011; Mann, Tomiyama, & Ward, 2015).

Despite the evidence that physical activity may reduce obesity and obesity-related morbidity, many Americans do not participate in regular physical activity. An estimated 21% of American adults achieve the recommended physical activity level (Blair & Powell, 2014; Buchner, 2014; Conn & Sells, 2016). Researchers have noted that the

United States is experiencing an epidemic of inactivity and lack of prevention of noncommunicable diseases (Bauman et al., 2012). Many adults and children are not engaged in physical activity at the recommended levels. Overall physical inactivity rates are high, so it is imperative to examine why some people are active and some are not. Multiple factors can influence physical activity engagement. Researchers must take a comprehensive approach in examining the impact on different populations. Health-related behaviors may be affected by attitudes and beliefs, as well as by family expectations and responsibilities. Understanding the causes of physical activity behavior is critical to developing effective interventions.

### **Physical Activity for African American Women**

Of concern is the fact that certain racial/ethnic minorities, particularly African Americans, are more physically inactive than are European Americans (Conn & Sells, 2016). African American women are more likely to have higher body mass index and be sedentary than the general population (Joseph, Ainsworth, Mathis, Hooker, & Keller, 2017). While public health professionals have designed lifestyle interventions to address physical inactivity within the African American community, the outcomes are mixed. Dharod, Drewette-Card, and Crawford (2011) found that African Americans showed the slowest rate of reducing risk factors for chronic illness which means that this population could benefit from healthy lifestyle interventions that include physical activity.

Physical inactivity is the impetus behind more attention to physical activity interventions. Despite a stronger focus on the subject, physical activity levels have not increased. This is especially critical for African American women who are at a higher

risk of obesity and obesity-related illnesses than the general population. More research is needed on the factors that affect African American women's physical activity engagement for effective intervention planning. Such approaches would require using theories that identify African American women's perceptions of physical activity behaviors and an intention to engage (Webb, Khubchandani, Hannah, Doldren & Stanford, 2016). Carter-Parker et al. (2012) have stated that it is important to understand translation of intention to engage in physical activity, attitude, subjective norm, and perceived behavioral control in order to create theoretically derived culturally appropriate interventions to increase physical activity engagement for African American women.

It is not clear from the literature what specific factors influence African American mothers' decision to engage in physical activity. Women have a variety of perceptions about physical activity. Public health professionals could benefit from a deeper understanding of African American women's physical activity perceptions, noting that physical activity is a way to promote health and social relationships (Sebastiao et al., 2015). Women also reported feeling guilty about having someone watch their children while they exercise and that other responsibilities are more important (Dlugonski et al., 2017); hence, physical activity is seen as a frivolous behavior due to family responsibilities and financial constraints (Im et al., 2012). Often women feel selfish for engaging in physical activity, and they see it as self-indulgent so not it is not prioritized (Im et al., 2012). This is problematic for African American mothers who experience negative health outcomes as do their children.

### **Physical Activity Motivators**

Physical activity has different meanings for different people. Understanding what motivates an individual to engage in physical activity is important in developing effective interventions. Just because someone is aware of healthy behaviors does not always mean that they will practice them, so exploring what motivates someone to engage in physical activity is vital in designing lifestyle change interventions.

Public health professionals have created lifestyle interventions to target African American women, especially to increase their physical activity. They have examined what motivates them to participate in physical activity, so that these interventions are effective. The research has revealed that African American women are motivated to be physically active by various factors. Coe et al. (2017) found that a sense of responsibility to family and children motivates them to engage in physical activity. Young, Gittelsohn, Charleston, Felix-Aaron, and Appel (2001) found that good health, weight loss or maintenance, and quality of life are motivators. Additionally, African American women want to be a role model for their children, relieve stress, and avoid health issues prevalent in their families (Mailey, Huberty, Dinket, & McAuley, 2014). These findings included a broader population of African American women which did include some mothers. However, the research community could benefit from more targeted investigation of African American mothers' experiences with physical activity that identifies facilitators and barriers to engagement.

### **Physical Activity Barriers**

Because African American women are at an increased risk for developing chronic health conditions and are less likely to engage in regular physical activity, it is important to explore barriers to physical activity. Physical activity intervention research indicates that white participants are more likely to continue with exercise compared to African American participants (Young et al., 2001). African American women struggle with consistent participation in physical activity (Webb et al., 2016). These and other findings indicate a need for more culturally tailored interventions for African American women (Kumanyika, 1993; Young et al., 2001).

The barriers to regular physical activity include a wide array of factors. Researchers suggested that physical activity barriers for African American women include personal, social and environmental (Eugeni et al., 2013). The personal barriers include hair, health concerns, fatigue, social support, immediate gratification, lack of motivation, and demands on time (Baruth, Sharpe, Parra-Medina, & Wilcox, 2014; Shuval et al., 2013; Versey, 2014). The social barriers include lack of support, negative pressure from family or friends and work community responsibilities (Carter-Nolan, Adams-Campbell, & Williams, 1996; Coe et al., 2017; Eyler et al., 1996). The environmental barriers include safe neighborhoods, gym memberships (Adams-Campbell, & Williams, 1996; Eyler et al., 1996; Coe et al., 2017; Price, Greer, & Tucker, 2013) An appropriately created physical activity improvement intervention should take these barriers into consideration depending on the location. This is critical in attempting to address physical inactivity for African American mothers.

### **Community Recreation Centers**

Multiple factors play a role in the decision to engage in physical activity, with environment being one of them (Ray, 2014; Siceloff et al., 2014). On an individual level, the opportunity for activity and accessibility of facilities has a positive impact on physical activity levels (Hamilton, Cuddihy, & White, 2013). The built environment (parks, buildings, facilities, etc.) can offer physical activity opportunities through community recreational facilities (Casper et al., 2013). The increase of physical activity is linked to behavioral and social correlates as well as social and environmental correlates (Kahn et al., 2002). Community recreational facilities can play a beneficial role in fostering physical activity among all ages and populations (Casper et al., 2013).

The community recreation center's role is important, because the health risks associated with physical inactivity worsen with limited access to opportunities for physical activity (Dahmann, Wolch, Joassart-Marcelli, Reynolds, & Jerrett, 2010). These centers provide a needed space for various types of recreation activities in the neighborhoods. Proximity for physical activities is one determinant of physical activity level within some urban populations (Siceloff et al., 2014). One of the barriers mentioned was a safe place to participate in physical activity.

The National Recreation and Parks Association (NRPA), which has a connection to many of the community recreation centers, has expressed a desire to expand its role in health promotion (O'Sullivan, 1999). In light of the critical need to engage the community in more physical activity opportunities, NRPA is an excellent partner to play a major role in the physical activity area. Community recreation centers can have a part in

providing and enhancing physical activity spaces (McKenzie et al., 2013). The number of community recreation is growing. There are an estimated 5,000 community recreation centers in the United States that have the potential to help promote physical activity to large numbers of individuals (Moody et al., 2004). Public health professionals have an opportunity to partner with recreation centers and collaborate on physical activity interventions that take into consideration sociocultural factors that affect African American communities.

### **Intergenerational Transmission**

Parents or primary care givers play an important role in the health of their children. Researchers found that parents' health risk behaviors can influence their children's health risk behaviors or intergenerational transmission (Wickrama, Conger, Wallace, & Elder, 1999). Family factors may impact health promotion in the home environment (Kennedy-Hendricks, et al., 2015; Pratt, McRitchie, Collier, Lutes, & Sumner, 2015). The home is the child's first learning environment. Parental modeling theory states that parents' own behavior has a powerful impact on their children's behaviors. Dietary studies support this theory (Brown & Ogden, 2004; Olivera et al., 1992). Children who are consistently exposed to healthy behaviors such as healthy eating and engaging in physical activity are more likely to adopt those behaviors. Parents are instrumental in assisting their children in establishing those initial health behaviors.

Parents who experience poor health conditions are not only putting themselves at risk but their families at risk as well. Based on this research, African American mothers have a pivotal health role within their families. They are at a higher risk of obesity and

obesity-related health conditions. African American children are at a greater risk for these same health conditions. African American mothers are in a position to influence their children's health.

African American families disproportionately experience chronic health conditions that ultimately affect quality of life. Public health educators have worked to raise awareness about the importance of healthy lifestyles in particular communities. However, they continue to experience high rates of physical inactivity, affecting health outcomes for the entire family. Mailey et al. (2014) noted that being a role model is known to be a facilitator for physical activity.

In light of research indicating that parents may influence familial health behaviors, it is important to explore creative ways to African American mothers with regards to health behaviors. As mentioned, African American women have lower physical activity rates than the general population, which is associated with other chronic health conditions. This supports the need to examine the factors that influence physical activity engagement for African American mothers and assist in developing more effective culturally appropriate physical activity interventions. Thus, the most obvious way to approach it is by understanding African American mothers' perceptions of physical activity and their intent to engage in physical activity.

### **Summary**

In this chapter, I reviewed previous research that examined the burden of obesity and obesity-related disease, physical activity, physical activity motivators, physical activity barriers, community recreation centers and intergenerational transmission of



health behaviors. The research shows an overarching issue of burden of disease and physical inactivity. African American mothers are an integral part of the family as the research supports the fact that mothers' health behaviors are transferred to their children. Unfortunately, African American mothers and children are disproportionately affected by obesity and physical inactivity as well as other chronic health conditions associated with physical inactivity. Sedentary lifestyles have become a norm. Community recreation centers can play a major part in health promotion, especially by offering a safe and affordable option for physical activity.

To address the issue of physical inactivity among African American mothers, it is important to understand their attitudes toward engaging in physical activity. In the next chapter, I will discuss the research study methodology, setting, sample, instrumentation, and analysis that will be used to gain a better understanding of the factors that influence the attitudes toward engaging in physical activity for African American mothers who visit community recreation centers.

## Chapter 3 Research Methods

### **Introduction**

The purpose of this phenomenological qualitative study was to explore the physical activity attitudes of African American mothers who frequently visit a recreation center in the Columbus, Ohio, area. In this chapter, I outline the qualitative method used to answer the study's research questions. I also explain the rationale for the study, role of the researcher, methodology, participant selection logic, instrumentation, recruitment, participation, data collection, data analysis plan, issues of trustworthiness, and ethical procedures.

### **Research Design and Rationale**

I used a qualitative design to gain greater insight into the physical activity attitudes of African American mothers who visit recreation centers. The need for a more in-depth understanding of what influences their decision of whether to engage in physical activity is a critical part in addressing overall health. In further exploring the decision-making process, a discussion about physical activity and the factors that influence the decision to engage in physical activity can help in designing effective physical activity intervention programs for this population.

Qualitative and quantitative designs are two approaches for conducting research. They have distinct methods for research inquiry (Grossoehme, 2014). Qualitative research lends itself to a deeper understanding of how individuals experience social phenomena because it is based on their personal stories (Grossoehme, 2014). It does not limit itself to strict boundaries because of its open-ended questions. Thomas and Magilvy

(2011) described the qualitative approach as a journey of exploration and discovery. The qualitative design is a more effective approach for gaining a deeper understanding of individual attitudes. The following research questions guided this qualitative phenomenological study:

RQ1. What are the attitudes of African American mothers who visit recreation centers about engaging in physical activity?

RQ2. What are the factors that influence the attitudes and decisions of African American mothers who visit recreation centers not to engage in physical activity??

RQ3. What are the factors for African American mothers who visit recreation centers that influence their decision to engage in physical activity as a model for their children?

As I used a phenomenological approach, I was able to elicit the participants' experiences with physical activity (Jacobs, 2012). Dahlberg (2006) described the phenomenological approach as one that emphasizes personal perspective in interpretation. Phenomenology takes into consideration the individual and the individual's environment and gives voice to the individual experience (Dahlberg, 2006; Ferencz-Flatz, 2011). With this approach, I was able to combine experiences and attitudes into themes that public health professionals can use for interventions or additional research (Dahlberg, 2006).

### **Role of Researcher**

As a qualitative researcher, my role in this study was to observe as well as to collect and interpret the data. A phenomenological approach entails interaction between the researcher and study participants to gain an in-depth understanding of the phenomenon. I developed the interview discussion guides, conducted the interviews, and performed the data analysis. I used an interview protocol, so each participant received the same questions in the same format. By conducting face-to-face interviews, I was able to observe verbal and nonverbal communication. The close personal interaction can initiate personal bias in the data collection process. To ensure integrity, I used bracketing to document personal thoughts or ideas that I had during the process (see Moustakas, 1994). I recorded them in a personal notebook.

Lastly, I had no personal or professional relationships with the participants or community recreation centers. A personal or professional connection can influence how participants may respond during a research study. It is important to avoid bias when possible.

### **Methodology**

#### **Participant Selection Logic**

The study participants were African American mothers who visit community recreation centers in Columbus, Ohio. Because the population focus was narrow, I applied purposeful sampling to recruit participants. When the researcher intentionally selects or recruits participants who have experienced the key phenomenon being examined in the research, it is considered purposeful sampling (Palinkas et al., 2015). I

selected the participants on the following inclusion criteria: (a) visitor (at least three times a month) at the community recreation center, (b) African American mother, and (c) over the age of 18. Prior to the interview, the participant completed an Institutional Review Board (IRB)-approved demographic questionnaire to ensure she met the inclusion criteria.

To recruit participants, I posted a flyer with a brief description of the study, participant criteria, information on the incentive for participation, and my contact information in the selected community recreation centers. I also asked directors and staff at the community recreation centers to distribute flyers to participants who might meet the eligibility criteria. The personal invitation from a familiar face increased the likelihood of participation.

In qualitative research studies, the sample size is small because the focus is on a particular phenomenon or the *how* and *why* a particular issue exists (Dworkin, 2012). The recommended sample size for phenomenology studies is 5 to 25 individuals (Mason, 2010). In this study, I interviewed 17 African American mothers. Based on the research, this sample size is appropriate (see Mason, 2010). For qualitative research, the data gathered should be sufficient to answer the study research questions to ensure that saturation is reached (Dworkin, 2012).

### **Instrumentation**

The instrument for this study was an interview protocol that included participant demographic questions. I designed the demographic questionnaire and interview protocol. These were approved by the IRB. I designed a demographic survey to collect

demographic data, which captured information that included (a) age, (b) marital status, (c) employment status, and (d) number and ages of children.

The interview questions were open-ended, so the women could respond in their own words to describe their attitudes and experiences. The questions were based on topics identified in the literature review as significant topics associated with African American mothers and physical activity (see Appendix A).

To ensure validity and reliability of the interview instrument, I conducted a pilot study of two participants who met the study criteria. Data from this pilot study were used to test the understanding of the questions as well as to ascertain if the questions yielded the required data.

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

After the initial contact with participants who met the study criteria, I arranged a day and time to meet them at the recreation center they visited for the interview. I conducted the interviews at the recreation center, which was a familiar place for the participants. A quiet room was secured for privacy. I contacted the participants 1 to 2 days prior to the interview as a reminder and confirmation. Participants completed an informed consent form prior to my conducting the interview. If the participant agreed, I audio recorded interviews. I took notes to ensure accuracy of the information that was collected. I structured the interviews to last 30 minutes. Once the interview was complete, the participant had the opportunity to ask questions or make additional comments. I reviewed study objectives and my contact information if a participant was interested in the study results. No follow-up interviews were necessary.

### **Data Analysis Plan**

Qualitative data analysis involves several steps. Gale, Heath, Cameron, Rashid, and Redwood (2013) outlined the process: (a) create and organize files for data, (b) read text to make initial codes, (c) describe personal experiences and essence of phenomenon, (d) develop significant statements and group into meaning, (e) develop textual and structural descriptions, and (f) present the essence of experiences in a discussion. The interview transcripts were reviewed after they had been transcribed. This step helped to address any data-collection issues early in the process. It was also important to read transcripts repeatedly for accuracy in understanding themes.

I compiled and coded data by themes. The coding process was manual and electronic. I reviewed the transcripts for the type of information that was provided, depth of responses, and details of notes. Next, I used NVivo to assist with coding and analyzing data. I entered the transcriptions into NVivo, and ran queries to capture themes. Coding is a repetitive process for examining data in detail to locate information relevant to the research questions (Ulin, Robinson, & Tolley, 2005). Data from the demographic questionnaires and interviews were imported into NVivo. The coding process analyzed data individually and collectively for all cases (Ulin et al., 2005). I used NVivo to help organize, classify, sort, and arrange information (Zapata-Sepúlveda, López-Sánchez, & Sánchez-Gómez, 2012).

### **Issues of Trustworthiness**

Qualitative research is subjective because the primary research tool is the researcher. Thus, measures to ensure validity are important. Validity is an issue of

trustworthiness. It is the process of checking the accuracy of findings so qualitative researchers can achieve trustworthiness through credibility, transferability, and confirmability.

### **Credibility**

Credibility is the equivalent of internal validity. I used reflexivity as one way of establishing credibility. Reflexivity is a continuous self-reflection of the researcher's positionality and recognition that this position may influence the research process and outcome (Berger, 2015). I used a notebook to take notes about my personal feelings, thoughts, opinions, and nonverbal communication. I also used member checking to ensure the accuracy of participant responses. Member checking is a technique that allows the participants to review their responses after the data are collected (Birt, Scott, Cavers, Campbell, & Walter, 2016). Once the interview was transcribed, the participant was contacted to review the transcribed interview to ensure accuracy of what was captured from the interview. I returned to the recreation center where she was interviewed and asked her to read the transcription for accuracy. I did not have to change any of the responses. These steps helped to minimize researcher bias.

### **Transferability**

Transferability is the ability to transfer research findings to other settings (Trochim, 2006). The goal of the research is to provide adequate information so that the study findings could be applied in similar contexts or circumstances. Thick description is a technique used to explain in detail the results and conclusions to an extent that they may be transferable to other settings. I took the necessary steps to develop the proper strategy



for the study so that it may be replicated in the same or a different population ensuring transferability

### **Dependability**

Dependability is the measure of ensuring that the results remain the same over a period of time (Trochim, 2006). I used several steps to this end: assessing interview transcripts for errors, documenting research process for replication, and requesting participants to review their interview transcriptions. By auditing the process, I established dependability and confirmability (see Lewis, 2009). The qualitative study methods are based on research (Maxwell, 2013).

### **Confirmability**

Confirmability establishes the value of the data (Trochim, 2006). One way of ensuring confirmability is reporting the research findings accurately. Additionally, disclosure of personal bias, detailed participant reports, and member checking. Reflexivity is important, because it involves self-reflection as a way to sidebar personal values, beliefs, and/or assumptions.

### **Ethical Procedures**

The most important aspect of this research is to ensure the safe treatment of participants. Participants must be protected from any form of physical, mental, or emotional harm (Ulin et al., 2005). The IRB process is one way to protect human subjects. A detailed application, which included the demographic survey, interview protocol, letters of agreement, consent forms, and other documents, was submitted to the

IRB for review. This study received approval from the Walden IRB committee prior to recruiting or engaging any participants (IRB approval # 02-09-17-0258094).

All of the participants followed the same interview process. I informed the participants of the risks and benefits of participating in the research study. I informed them of the study objectives as well as how to withdraw. Each participant signed a consent form prior to participating in the study. The study was voluntary, and each participant received a copy of her signed consent form.

I assigned each participant a unique identifier number to protect her identity. I used this number on all of data collection tools. I am the only one with access to the numbers and corresponding participant names. The numbers and participants' information have been secured in a file that is password protected. All hard paper copies have been secured in a locked box and locked in a cabinet. They will be secured for five years. I am the only one who has access to these files.

Participants received a \$10 gift card for taking the time to participate in the interview. The gift card was from my personal resources, so there was no conflict of interest from a third party. The gift card amount is low, and I have no personal relationship with any of the participants to avoid any risk to the research.

### **Summary**

This chapter outlines the research design and rationale, role of the researcher, participant selection, and trustworthiness of the research. I intentionally chose personal interviews because they lend themselves to more in-depth responses and understanding of the factors that influence physical activity engagement. Through these interviews, I was

able to ascertain the lived experiences concerning physical activity engagement for this population. I took steps ensure that my role as researcher did not have a negative influence on data collection. Participants met the selection criteria. They were treated in a safe manner. I conducted the research after IRB approval.

## Chapter 4: Results

### **Introduction**

The purpose of this phenomenological qualitative study was to explore the physical activity attitudes of African American mothers who visit recreation centers in the Columbus, Ohio, area. This chapter presents the findings from semistructured interviews with African American mothers regarding physical activity. The mothers' personal experiences with physical activity were captured through the personal interviews. The research questions for this study were:

RQ1. What are the attitudes of African American mothers who visit recreation centers about engaging in physical activity?

RQ2. What are the factors that influence the attitudes and decisions of African American mothers who visit recreation centers not to engage in physical activity?

RQ3. What are the factors for African American mothers who visit recreation centers that influence their decision to engage in physical activity as a model for their children?

The current research on physical activity focused on African American women, but not specifically on African American mothers. African American mothers have a critical role in the family. Prior studies failed to investigate the factors that impacted African American mothers' physical activity attitudes.

### **Pilot Study**

I conducted a pilot study in May 2017 for this research to determine if the developed instrument was appropriate and to increase the validity of the study. I pilot-tested the questionnaire on two participants. The findings from the pilot study revealed that I needed to ask some probes to produce more detailed responses to the questions, which would assist in answering the research questions. Based on the information from the pilot study, I adjusted the questionnaire and found this change provided more detailed information from the participants.

### **Setting**

I conducted the study in Columbus, Ohio, between March and June, 2017, at five Columbus recreation centers. Based on market research data obtained from the Ohio Department of Health, these recreation centers are in areas where adults are least likely to exercise routinely. The reason for this may be lack of safety and/or sidewalks in the neighborhood. Figure 1 illustrates the five recreation center neighborhood areas by zip codes.

The recreation center services are tailored to the needs of the specific community in which they are located. All of the centers have an exercise space or room and offer some type of fitness class. Typically, the hours of operation are from midday 12:00 pm to late evening approximately 9:00 pm. The center hours accommodate a variety of community members' work and school schedules. I conducted the personal interviews in a private room in each of the selected recreation centers.



*Figure 2.* Map illustrating areas for recreation centers

### **Demographics**

The participants for this study were limited to mothers who visited Columbus recreation centers. The participants self-identified as African American. All 17 participants satisfied the inclusion criteria. Table 1 provides the participants' pseudonyms, as well as age, marital status, highest level of education and their number of children.

Table 1

*Demographic Information*

Pseudonym	Age	Marital status	Highest level Education	Employment	Number of children
Marie	44	M	BA	F	2
Skylar	38	S	M	P	1
Peggy	42	M	BA	F	4
Tonya	24	S	HS	F	3
Ashley	31	M	HS	F	3
Nicole	44	M	BA	F	3
Mya	44	M	BA	F	2
Liana	61	M	BA	F	1
Artie	34	S	BA	F	1
Marge	33	M	BA	F	2
Cathy	36	M	BA	F	3
Raven	40	M	BA	F	2
Monessa	33	S	BA	F	2
Danette	39	D	BA	F	3
Barb	61	M	BA	F	2
Vida	53	S	BA	F	4
Deb	57	D	HS	F	7

The participants' ages ranged from 24 years to 61 years. The average age was 41 years. The participants' marital status varied with ten being married, two were divorced, and five were single. One of the married women stated that she was separated from her husband. Two of the single women lived with the father of their children. Five of the seventeen women reported living alone with their children (ages from 6-20 years) and one of them was the primary caretaker for her elderly father and 15-year-old son. One of the participants had a graduate degree. Thirteen of the participants had college degrees. Three of the participants had high school diplomas. As far as employment, 16 of the 17 women worked full time and one woman worked part time. One of the women who worked full time also reported having a part-time job.

### **Data Collection**

Seventeen participants met the criteria for the study, including the two interviewed for the pilot study. I posted recruitment flyers on bulletin boards and at the front desks in five Columbus recreation centers. I spent time in the recreation centers and participated in various activities at each of the designated centers. Potential participants approached me while I posted flyers, participated in center fitness activities, or called me after seeing the flyer in the centers. Once criteria were affirmed, I scheduled a time to interview each potential participant at the recreation center where she saw the flyer. From these potential participants, 17 participants were interviewed.

I conducted face-to-face interviews at five Columbus recreation centers. The interview length ranged from 20 to 45 minutes. The average interview was 30 minutes.



The interviews took place during regular operation hours 12:00 p.m. to 9:00 p.m. I used a questionnaire to guide the semistructured interviews (see Appendix A).

After receiving signed consent, I assigned the participant a unique name identifier to protect her identity. I recorded each interview on a Sony digital voice recorder and took notes. At the end of each interview, I also made personal notes about my reflections of the interviews. The interviews and notes were uploaded to a password-protected computer. I listened to each recorded interview and transcribed the interviews verbatim. I transferred the transcriptions into a Word document. The transcriptions were uploaded into NVivo 11 for organization and data analysis.

### **Participant Selection**

I selected participants based on purposeful sampling strategies. I informed the participants of the purpose, design, inclusion criteria, and a small cash incentive. We agreed upon a convenient time, and the interviews were conducted at the recreation center where the participant was recruited.

### **Data Analysis**

For data analysis, I used NVivo 11 to assist with the identification of themes in the interview transcriptions. The uploaded transcriptions were analyzed for recurrent themes that were then coded. I also listened to the recorded interviews and read the transcriptions. As recommended by Moustakas (1994), I read through each transcription several times and then coded by hand. I reviewed the collected data and then grouped them according to the interview questions as well as the research questions. The participants were randomly assigned pseudonyms to protect their identities.

## **Themes**

This section presents the thematic analysis of the data. I listened to the interviews while reading them. I reread the interviews to find consistencies or commonalities among the responses as they applied to the research questions. From the findings, five core themes and five subthemes resulted. The five core themes were physical movement, environment, physical health, schedule, physical appearance, and well-being.

## **Results**

The goal of the research study was to gain greater insight into the factors that affect physical activity among African American mothers at recreation centers. Data collected during the interviews were used to answer the research questions. In all, six themes were produced from this data.

### **Research Question 1**

RQ1: What are the attitudes of African American mothers who visit recreation centers about engaging in physical activity?

To assess the study participants' attitudes, I asked the participants

- What does physical activity mean to you?
- During the past 7 days did you participate in any moderate physical activity like running, walking briskly, fitness class, or exercise DVD?
- “How much time do you spend when you do moderate physical activity?”
- What role does physical activity play in your overall health?”
- What role does physical activity play in your family's life?

The themes that emerged were (a) physical movement, (b) environment, and (c) physical health. The themes correspond with interview questions IQ9, IQ10, IQ11, IQ11, IQ12, IQ13.

**Theme 1: Physical movement.** IQ9 read, “What does physical activity mean to you?” All 17 participants responded that physical activity meant some type of physical movement or mentioned a particular sport. Vida said, “Getting out exercising, moving your body. It keeps you from getting stiff.” Tonya said, “Being active, something with movement.” Monessa responded, “Physical activity means being active.” Peggy stated, “Physical activity is any type of activity that requires any type of movement. Any sport, physical sport whether it’s basketball, cheerleading, football, anything that requires that activity as far as exercising.” Artie and Nicole stated,

Physical activity to me is when you keep your body moving and outside of just reaching for something or walking from the door to the restroom or something of that sort. It’s a matter of just constantly moving your body for at least more than five minutes (Artie).

Physical activity means anything that causes my body to do anything but sit in the chair or on the couch or lay in the bed. I know that it requires more than that to be considered physical activity. Anything that causes a limb or body part to move.

Danette: Physical activity, getting up, moving around. It could be biking, swimming, mowing the lawn, walking, going to work out (Nicole).

IQ11 read “During the past 7 days did you participate in any moderate physical activity like running, walking briskly, fitness class or exercise DVD?” All the participants

responded to the question. The average amount of days was three. Three women responded that they had not participated in any moderate physical activity. One woman had participated in moderate physical activity once. One woman responded two days. Four women responded they had been moderately active three days. Three women stated that they had been moderately active four days. One woman responded that she had participated in moderate physical activity for five days and four women responded seven days. The majority of the participants were able to identify specific ways she had been physically active during the previous seven days. Mya responded, "Every day." Vida stated, "I would say about four days." Monessa said, "Every single day walking; from the parking garage to my office and then on my lunch I walked to the Scioto mile. I usually walk around the arena district." Cathy and Artie also expressed their levels of activity.

On my fitbit, this is my fifth time this week. I walked a couple times. At work I get away from my desk. I work in Gahanna, so the neighborhoods are always super nice. The weather has been nice lately. I will get out during my work day a couple times (Cathy).

Four days. I went to the rec center three of the four. One day was jogging and then a hit mix of work outs and the other day was jogging with the Girls on the Run. And I did cycling and a hit mix of workouts. Then on my own I did a rowing machine. I tried to make up my own HITT work out (Artie).

IQ12 read, "How much time do you spend when you do moderate physical activity?" The average amount of time spent on moderate physical activity was 60 minutes. Four women responded 30 minutes. Three women stated that they spent 30 to 60

minutes on moderate physical activity. Five women said 60 minutes. Three women responded 60 to 180 minutes. One woman stated that the time she spends varies. One woman responded all day due to the nature of her job. Monessa stated, "Honestly, I try to do anywhere 30 minutes." Mya responded, "About two to three hours per day."

According to Raven, Cathy, and Barb,

I try to do 30 minutes. Like if I do the elliptical, I try to do 30 minutes but some of those programs like masters hammer and chisel is like only 25 minutes, but you're lifting a bunch of weight. On average I try to do 30 minutes (Raven).

Boot camp is one hour, walking it has been about 45 minutes and 15 to 20 minutes for breaks throughout the day. Then in the evening I will walk the dog.

We take him on like a 20 minute (Cathy).

The line dance is for one hour. When I walk for about 30 minutes to an hour cause I have my husband to sometimes walk with me in the morning at Marion Franklin Recreation Center. They have an outside trail behind the tennis courts (Barb).

IQ15 read, "What role does physical activity play in your family's life?" Fifteen of the participants responded that physical activity had a significant role in their family's health, and cited specific examples of their physical movement. One participant stated that it kept her family busy. One participant responded that it did not have a major role in her son's life and that he was not active. Mya stated, "I try to make sure that everyone in the family is moving. We have family exercise day." Cathy stated, "It's very important. All of my children are involved in several different sports." Marge responded, "My husband is a junior Olympian. He's all about working out. The kids I make sure they do

karate or get out of the house to do something.” Liana stated, “My husband is extremely fit. When we met we met playing tennis. I had my daughter late. She is 25. She is a walker.” Monessa said,

Very important to my kids. They both are very active. You see the kids in there trying to do Zumba with me. We try to make it a family effort. We dance a lot. We just like to have fun period, working up a sweat. We just like to have fun (Monessa).

**Theme 2: environment.** IQ10 was as follows: “How was physical activity modeled to you growing up?” All of the participants responded that they were exposed to physical activity in different ways through their environment such as their parents, siblings or friends. Barb said, “My mom and I walked everywhere. When there was nothing to do we would just go walking uptown and window shop, so we were always walking.” Peggy stated, “My mom got us involved in a lot of things especially when we were old enough to go to camp.” Raven, Cathy, and Skylar said,

I always remember my dad. Him riding his bike to work was weird to me, because it was not close to the house. One time he took us on a bike ride and we were trying to keep up with him on this big hill. I mean really (Raven).

I hated it. I was on drill team when I was in high school. You know my mom and dad use to make us do family activities. It took me forever to learn how to ride my bike (Cathy).

My mom played softball back when she was in high school and college years, but as far as me growing up they weren't active. They weren't going to the gym or going to a work out class (Skylar).

**Theme 3: Physical health.** IQ13 read, "What role does physical activity play in your overall health?" Twelve of the participants responded by identifying physical health issues such as a particular disease or physical feeling. Each one was clear about what health issues she wanted to avoid. Nicole stated, "It gives me more energy in the end." Mya responded, "It helps me to keep able to move. And it gets rid of my soreness and stiffness." Artie said, "I believe it plays a major role in overall health, because when you gain weight it can have an effect on your internal organs. It can put pressure on your body and your joints." Raven, Danette, and Liana stated,

Well you know my dad and my grandpa had high cholesterol. I think it's hereditary, because mine is. I can tell a difference when I go have blood tests at the doctor when I've worked out and when I haven't. I think it plays a major part (Raven).

: I think it plays a big role. I just had my biometric screenings today. All of my numbers are excellent, so I think it plays a big role. In my family, we have a lot of diabetics, heart disease, early deaths, cancers, so I think it plays a role. It contributes to my numbers being good and things of that nature (Danette).

A whole lot. And I was on a CPAP machine and my knees were failing me. And that's before I started spinning. I say all that because that has encouraged me to exercise more, so I got off the CPAP machine. I've lost 25 pounds and now I've

never been on high blood pressure medicine. My blood pressure is good. It's really to stay off of medication. I knew intuitively that I was insulin resistant (Liana).

Three of the participants responded that it helps them with their mental health. One participant stated that it keeps her busy. One participant said she has to be physical and that it would drive her crazy to sit all day.

### **Research Question 2**

RQ2: What are the factors for African American mothers who visit recreation centers that influence their decision not to engage in physical activity?

The question addressed barriers that might inhibit physical activity. All of the participants responded to IQ13: "What types of things keep you from engaging in physical activity?" Ten of the participants responded that something often interfered with their daily plans, such as children's activities, work or family obligations, keeping them from engaging in physical activity at some time. The theme that emerged was schedule. Many of the participants mentioned how they try to juggle work, family and other commitments. Ten of the participants responded that their schedules can interfere with their physical activity engagement. Three of the participants stated that not feeling well would prevent them from being physically active. One participant said the weather being cold and wet would prevent her from physical activity. One participant said not being able to take her child with her to the gym. Two participants said nothing keeps them from being physically active and that they try to find ways to be active around the house through house work.



**Theme 4: Schedule.** IQ13 was, “What types of things keep you from engaging in physical activity?” Monessa said, “School activities with my kids, me volunteering. My work does. If I have a lot going on, I will skip lunch and usually walk during lunch. Busyness gets in the way. Marie stated, “Scheduling and sometimes time is an issue and sometimes work is an issue.” Liana said, “Traveling, when I visit my mother in North Carolina. They walk a little, but it’s not brisk. I’m engaged in a lot of meetings. If I have a meeting, I try to work around all of that.” Marge stated, “Work, instability like financial instability. I say work, because it takes my time. And then just other responsibilities, people or commitments, people asking for my time or I commit to something.” Cathy, Raven, Nicole, Skylar, Marge, and Danette added their perspectives.

Schedule. My own laziness. My kids are just being kids, but sometimes when I get home I just want peace and quiet. I just want to sit down and I just want to go to sleep. Sometimes I listen to my body and my body is telling me to relax and take a day, take a breath. I do that. Take a nap. I do that (Cathy).

Being a mom. When I come home it’s like the second shift where you work a full-time job. Your second shift, but your main shift. You cook. You got to do homework. You got to give baths, clean the house, run somebody to practice (Raven).

Honestly, my busy schedule, making time for myself to do it. I have a treadmill at home. Occasionally, I will get on it. Sometimes I walk past it and shake my head like I paid all that money for that treadmill and I walk past it every day, but sometimes my kids are so busy. I’m so tired at the end of the day. I work full

time. I have a part time job every except Sunday. Monday is basketball. Tuesday is cheer. Wednesday is track. Thursday is cheer. Friday is drill. Saturday is AAU practice. Sunday is the only day that my kids one of them or both of them don't do something. Honestly, this is like get off at 5 o'clock get home make sure they've done their homework, make sure dinner is rolling and then we're out the house by 6 or 6:15 to go to one of the places we need to be and back home at 8:30 or 9pm, so it's kind of hard for me to make time for myself (Nicole).

The only thing would really be my schedule. Sometimes it just happens like this week was just one of those weeks and today is the only day that I can work out, because of my schedule. Typically, I don't plan stuff or put anything on those days 'cause I know those are my days, but sometimes life just happens (Skylar).

Them kids. Kids and work. I work a lot of hours being in my position. Then trying to juggle other things like being on the board here and in different things that I try to stay engaged in. Those are things that may keep me from physical activity (Danette).

### **Research Question 3**

RQ3: What are the factors for African American mothers who visit recreation centers that influence their decision to engage in physical activity as a model for their children?

The participants were asked "What types of things motivate you to engage in physical activity?" and "What role does physical activity play in your life. The themes from the responses included physical appearance and well-being. The themes correspond

with IQ17, and IQ14. Four of the participants mentioned their children as a motivating factor. Ashley stated, “My kids and then I want to fit in what I want to wear at a certain time.” Vida said, “Seeing my boys, watching them just moving.” Peggy stated, “I think the kids. The girls seeing them.” Tonya responded, “My kids most definitely.”

**Theme 5: Physical appearance.** IQ17 was, “What types of things motivate you to engage in physical activity?” Thirteen participants responded that they engaged in physical activity as a way to improve their physical shape. They wanted to lose weight or not gain weight. Marge stated, “I just want to look and feel my best. I want to feel strong. I want to be 63 and still look like I’m 33.” Mya said, “Not gaining weight. I want to buy new clothes and cute shoes and cute workout gear.” Marie responded, “I’d like to lose weight.” Deb stated, “Wanting to see a greater and better physical outcome on myself. I wanna see them curves baby. I’m looking for them. I’m still looking for curves.” Cathy and Raven added,

My “dunlap.” My belly done lap my pants! That’s a motivator. The scale is a motivator. I have back tits. That’s a motivator. Yes, ma’am. That’s what they are. I’m opposed to them. They enrage me. I look in the mirror and I’m like you’re getting out of control. That helps me. When I know how I want to be in my mental image I try not to get too sucked into media and things like that. It’s what I want to look like (Cathy).

Raven: When my clothes don’t fit. That was the last straw this time. I’m never not doing anything. Being stronger. I like weight lifting. I want to see my muscle. I want to beef up. I want to be a fit grandma. I want to be the mom that walks into

graduation and everyone is like, “Whose mom is that with that too-short skirt on?”

Three participants stated that family was a reason to engage in physical activity. One participant said to distress.

**Theme 6: Sense of well-being.** IQ14 read, “What role does physical activity play in your life. Twelve participants responded how important it was for their well-being to be physically active. Barb stated, “Just knowing that I want to distress.” Artie said, “I think more so mental health.” Peggy stated, “I think that it is kind of a stress reliever, because I can go for a walk.” From Monessa and Marge:

My health. My overall health. My well-being. I notice that when I start slacking off, I don’t have my “mojo.” It takes longer for me to get into my groove. It helps my energy levels. My health is my biggest motivator, because I do not want to be confined. Take care of myself while I’m still younger. You start thinking about these things when you turn 30 (Monessa).

It’s made me a more positive person. It’s allowed me to see that I do the things that I didn’t think that I could even for a minute or I can do a plank even if it’s modified or I can push myself even when it hurts and I can see some results. You know what I mean. Then I think what areas of my life other than physical can I challenge myself more. I’ve been slow getting my health together and then I started applying my work. I’m looking at other opportunities. It has helped change my life for the better. It really has. I’m pushing myself in this area then I can push myself in other areas, too (Marge).

## **Evidence of Trustworthiness**

### **Credibility**

It is important that the data collected is valid and trustworthy. Prior to the actual interviews, I attempted to build a rapport with participants by spending time in each of the recreation centers. Establishing a trust level with participants helps to create a safe space to share their responses with me. I used a reflective listening process while interviewing the participants. This process entailed taking notes and reflecting what was said back to the participants. I asked for clarification of a response if I was unclear of what she meant. I wrote in a journal to keep my personal bias separate from data collection methods. I employed member checking to ensure that I captured what the participant wanted to convey in the interview. They were asked to review the transcribed interview for accuracy.

### **Transferability**

The participants gave thick descriptions of their experiences during the interviews, which helped to ensure transferability. I transcribed verbatim, wrote field notes, and used a journal to capture personal thoughts. The participants provided detailed descriptions of how physical activity affected their lives, which demonstrated a transparency to share their experiences. They relayed information that described its impact on them personally as well as their families. The detailed descriptions may assist in the transferability of study findings to other settings.

**Dependability**

I took the necessary steps to ensure dependability. With consent, I audio recorded the interviews, took field notes, and wrote in a reflective journal. I transcribed the interviews using OTranscribe. I listened to the recordings as I re-read transcriptions to ensure accuracy of the transcriptions, which were then transferred into a Word document. The document was uploaded into NVivo11 software as a means to store and organize data for analysis.

**Confirmability**

I used a reflective journal for confirmability. In addition, I was able to record personal thoughts and reflections during this research study. The reflective journal was a tool to keep my biases separate from the data. Member checking was used to confirm accuracy of the study findings. After I had transcribed the recorded interview, within one to two weeks of the interview, I returned to the recreation center and allowed the participant to review the transcription for accuracy. I did not have to make any changes to the transcriptions.

**Summary**

The purpose of this qualitative research was to explore the lived experiences of African American mothers and the factors that influence their physical activity. This chapter provided information on the data collection methods and analysis of the data collected. I outlined the appropriate techniques applied to the study.

The responses from the participants revealed factors that affected physical activity among African American mothers who visited recreation centers. Three research

questions guided the study in addressing the phenomenon. The first question explored attitudes about engaging in physical activity. Most of the participants associated physical activity with some type of movement. They also made a connection between physical and mental health to physical activity. In addition, they identified specific ways that physical activity prevents illness and helps an individual's mental state.

The second research question explored the factors that prevented the participants from engaging in regular physical activity. A majority of participants cited specific things that interrupted their planned daily activities. They stated that these unexpected responsibilities made it difficult to follow through with a planned exercise routine.

The third research question explored the factors that motivated them to engage in physical activity. The major topics that emerged were desire to remain healthy for their family and for their physical health. They also noted how physical activity would improve their physical appearance, for example by losing weight or toning their bodies.

The last section of this chapter outlined the trustworthiness of this study, including credibility, transferability, dependability, and confirmability as they related to techniques addressed in chapter 3. Chapter 5 provides the interpretation of findings, recommendations, and implications.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

The purpose of this qualitative study was to examine the physical activity attitudes of African American mothers who visit recreation centers and the factors that influenced whether they engaged in physical activity. A sample of 17 African American mothers were interviewed as part of this research. The study objective was to explore the barriers and motivators for African American mothers' physical activity engagement. I analyzed the interview data to gain a deeper understanding of the women's reflection on physical activity engagement. The TPB was used as the theoretical framework to examine how the mothers' attitudes, environment, and perceived control over their behavior possibly affected their decision to engage in physical activity. Chapter 5 provides a detailed discussion of the research findings, which includes the themes for each research question, the relationship of those themes to the literature, recommendations for future research, practice, and policy, as well as the study limitations.

### **Interpretation of the Findings**

The research study findings may assist city recreation workers as well as other community health workers find innovative ways to engage African American mothers in more physical activity. The findings from this research study highlight the physical activity perceptions of African American mothers and the role physical activity has in their lives. The information in Chapter 2 noted the gap in the literature, which focused on African American women and not specifically on African American mothers (Ray, 2014;



Versey, 2014). Health disparities exist between African Americans and the general population. African American mothers are an integral part of the family and their behaviors help to shape familial health behaviors (Hines & Boyd-Franklin, 2005).

I used the following questions to explore these perceptions:

RQ1: What are the attitudes of African American mothers who visit recreation centers about engaging in physical activity?

RQ2: What are the factors that influence the attitudes and decisions of African American mothers who visit recreation centers not to engage in physical activity?

RQ3: What are the factors for African American mothers who visit recreation centers that influence their decision to engage in physical activity as a model for their children?

Each of these research questions produced the following themes: physical activity, physical health, environment, schedule, physical appearance, and well-being.

### **Theme 1: Physical Activity**

The majority of the women responded that physical activity meant a form of physical movement. Many of the participants in this study understood that physical activity meant to move the body and not be sedentary. Their responses ranged from identifying a specific sport, such as basketball, to simply walking more throughout the day. The participants said they tried to incorporate physical activity into their daily lives. They were able to engage in moderate physical activity on average 3 days during the previous 7 days from the interview and for an average 60 minutes. These responses challenge the research that noted that African Americans are more physically inactive

than European Americans (Conn & Sells, 2016). The findings also support the application of the TPB, because the women expressed positive attitudes toward engaging in physical activity. The TPB has been useful in examining health behavior attitudes, suggesting that behavioral intentions are driven by the attitude toward performing the behavior and the perceived control over it (Gulley & Boggs, 2014; Prapavessis et al., 2015).

### **Theme 2: Physical Health**

The study findings revealed that many of the women understood the relationship between physical activity and overall physical health. Many of the women had either personally experienced or witnessed family members who had suffered from a chronic health condition. The participants stated that they knew that being physically active would aid in preventing chronic health issues such as obesity, diabetes, cancer, hypertension, and several other illnesses. These findings supported research by Siceloff et al. (2014) that physical inactivity is linked to several chronic illnesses and premature death. These authors further explained the importance of investigating the factors that would promote higher levels of physical activity engagement. Popkin et al. (2012) also found a strong connection between obesity and serious health issues. They reported significant changes in people's diet and the level of physical activity in the past 20 years. However, these researchers explained the detrimental effects went unnoticed until hypertension, diabetes, and obesity became a global issue in the early 1990s (Popkin et al., 2012).

A majority of the women participants in my study shared specific examples of the effect that physical activity had on their health, such as weight loss, increased mobility, discontinued use of c-pap machine, and other benefits. The women attempted to be physically active because they knew the overall health benefits. The women's positive attitudes toward the health benefits of physical activity validated the use of the TPB, which posits that behavioral intention is determined by the attitude toward the behavior (Montano & Kasprzyk, 2008).

### **Theme 3: Environment**

Research shows a positive link between children's physical activity and parent's physical activity (Davison et al., 2011). A majority of the participants in my study witnessed family and/or friends engage in physical activity. However, none of them specifically stated they believed that the exposure to physical activity had some influence on their physical activity engagement. Many of these women stressed the importance of their physical activity and their children's physical activity as well. Most of the participants responded that physical activity was an important part of their family's life. The fact that some of them had engaged in physical activity with a parent when they were young may have provided a framework for them to engage in physical activity with their children, but it is not substantiated by the data. Research by Davison et al. (2011) on parental influence on a child's emerging physical activity patterns validates this point. Parents who experienced physical activity modeling as a child are stronger in their ability to then promote physical activity to their children.

**Theme 4: Schedule**

A safe space to exercise was noted as being a barrier for African American women (Lee et al., 2013). However, the study participants visited a recreation center, which offers a safe space for physical activity. The consistent issue that kept the participants from engaging in physical activity was their schedule. Many of the women experienced demands on their personal schedules that kept them from being physically active on a regular basis, such as working long hours transporting their children to activities, taking care of family responsibilities, participating in community activities, and helping other family or friends. These women said they addressed familial responsibilities before taking time for personal care. These findings supported the need to explore more in depth how African American mothers are able to address responsibilities that inhibit regular physical activity. The women in this study said they had access to a recreation center and most of the activities offered in the recreation center. However, they described that, in their roles as mothers, their other responsibilities were a priority. The participants said it was a challenge to balance work, family, and personal care. Four of the women commented that their children motivated them to be physically active. They responded that it was important for their children to see them being active as well as be physically active with them. Additionally, there were other factors that motivated them to be physically active such as physical appearance and well-being.

**Theme 5: Physical Appearance**

Several participants mentioned they engaged in physical activity because they wanted to work on their physical appearance of their bodies. During the interviews they

discussed in detail their physical appearance, such as fitting into cute work-out clothes or getting rid of a large stomach. The participants said that they were aware that weight gain did not occur rapidly. Their physical appearance was a gradual change that happened over time, which meant it would take some time for them to make physical changes. This understanding supported findings by Reiner et al. (2013) in that physical conditions develop over time. This research reinforces the need for a consistent physical activity routine, which promotes better overall physical health and has a protective effect against chronic disease.

### **Theme 6: Well-Being**

The findings from this study showed that African American mothers felt the need to engage in physical activity for their overall well-being. The mothers shared how it offers a way to destress and provides mental clarity. In addition, the participants identified ways they engaged in physical activity with their families such as playing sports, walking, dancing, and fitness classes. These findings provide evidence to support the research showing a connection between a mother's physical activity and children's health behavior (Didericksen & Berge, 2015; Grossklaus & Marvicsin, 2014; Hooper et al., 2014).

Mothers play a significant part in their children's health. Didericksen and Berge (2015) make a strong case for understanding that a parent's health would help to understand the family's health. Parents have a strong influence on the family's health behaviors. Grossklaus and Marvicsin (2014) noted that children were highly influenced by those individuals around them regarding exercise and nutrition. In addition, Hooper et

al. (2014) highlighted the link between adolescent behavior and parental behavior. The participants in my study saw the need for physical activity in their children's lives.

I also found that physical activity played a significant role in the participants' lives and their families' lives. The women mentioned how physical activity helped them to destress, have a more positive attitude, keep up with their children, and make positive changes in their lives. The participants maintained busy lives as mothers. Their multiple responsibilities made it a challenge to balance work, family, and personal care. However, their personal responsibilities were a priority. They described their familial role as the focal point in their families. As mentioned, when asked about barriers, a majority of the women stated that their schedule, which included familial responsibilities, inhibited their ability to engage in physical activity. Their families relied on them to model healthy behaviors. Many of the women felt that they needed to motivate their families to be physically active. These mothers expressed a desire for their entire family to be well. This finding supported research by Elder et al. (2013) that mothers are not only responsible for their own health but also for modeling healthy behaviors for their families.

The findings of my study suggest that African American mothers are aware of the importance of physical activity for themselves and their families. The participants said that as young girls and adolescents, they were physically active. However, their physical activity routine changed as they became parents and their roles had been redefined. As mothers, it had become more difficult for them to find the time to be physically active.

### **Limitations of the Study**

The findings are limited to African American mothers over the age of 18 years who visit Columbus, Ohio, recreation centers, and who participated in the study at selected recreation centers. The findings are reflective of those mothers who volunteered to participate in this study. The results may not be generalizable to other African American women. The sample size for this study was 17, which was adequate for this type of study (see Leedy & Omrod, 2010). The small sample size does not reflect the entire population of African American mothers. The interview questions were pilot tested with women who represented the study population.

Although I resembled the study population, I was not from the community where they lived. My beliefs and experiences may have differed from what they may have experienced. Whenever I was unclear about a response, I repeated back to the participant what I thought I heard her say, or I asked for clarification to ensure accuracy for these one-time interviews.

It was important that I was aware of my point of reference as it related to the information shared in the interviews. This was apparent as the participants described physical activity and their exposure to it in their younger years. I was conscious of my tone and nonverbal communication throughout the interviews.

### **Significance of Findings and Social Change Implications**

This qualitative study examined the attitudes and experiences of African American mothers who visit recreation centers about engaging in physical activity. I sought to understand the women's attitudes by listening to their lived experiences. The

core themes from the findings helped to answer the overarching research questions. At the time of data collection, the research that addressed African American mothers' physical activity engagement was limited. The results from this study contribute to the literature by providing a clearer understanding of how African American mothers perceive physical activity engagement and specifically those factors that influence if they engage in physical activity.

The findings from this research highlight what physical activity means to African American mothers. A significant implication of the findings is these mothers desired to be active, but familial and personal responsibilities were priorities for them. Many of them recalled how they were active when they were younger and even involved in different sports activities. However, as parents, they find their lives are directed by their family roles.

The recreation directors in the individual centers should reflect on the factors that motivate or constrain African American mothers from engaging in physical activity. These directors can utilize community resources to assist in addressing the issues pertinent to African American mothers, which is an opportunity for the centers to create a stronger relationship with this population. These mothers are a valuable resource. These mothers can provide ideas for helping them be more physically active.

The study results may promote social change by providing recreation center leaders and other public health leaders with a clearer understanding of African American mothers' physical activity attitudes. The information can be used to enhance or create physical activity programs that take into consideration the experiences of this population.



The findings may also provide leadership personnel with a framework to explore physical activity attitudes for other populations they serve. It is possible there may be some overlap of experiences with other population groups, which may offer an opportunity for cross fertilization between different population groups to promote physical activity.

The implications for social change include a deeper understanding of how African American mothers' separate roles influence their ability to achieve a healthy lifestyle. While many of the participants talked about the need to be more physically active, their roles as mothers superseded taking care of their physical health. Thus, they were not consistent with their physical activity routines. Therefore, practical ways to address these barriers would assist with long-term physical activity engagement.

A majority of participants described family, especially children, as a key factor in wanting to be healthy and live longer. Mothers are an integral part of the family, so assisting them to attain a healthy lifestyle is vital. These mothers have a significant role in taking care of their families as well as modeling healthy behaviors to their children and other family members.

### **Recommendations**

The emerging data from this research add to the literature concerning the factors that influence physical activity engagement for African American mothers and provide a basis for proposing recommendations. The data also highlight the impact these mothers' familial roles had on their decision to take care of themselves through physical activity. The recommendations include additional research about African American mothers'

prioritization of physical activity as well as culturally sensitive policy and practice change beginning at the city level.

### **Recommendations for Future Research**

The findings suggest more research is needed on the motivating factors for physical activity in African American mothers. Throughout the interviews, several reasons emerged why these women saw the importance of, and may engage in, physical activity. It would be beneficial to explore what might enable them to be consistent with a physical activity routine over a long time period. The ability to maintain a consistent physical activity routine was challenged by competing responsibilities.

Another key factor to examine is work. Many of the women stated that their hectic schedules kept them from engaging in regular physical activity. It would be valuable to explore the ways in which those mothers who are physically active, while balancing work and family responsibilities, were able to find a way to fit it into their hectic schedules. African American mothers can help other African American mothers attain a healthy lifestyle. This information should be shared through community research efforts most suitable to the surrounding recreation center neighborhoods.

### **Recommendations for Practice and Policy**

Physical inactivity is higher for African American women compared to the general population. Based on my findings, I recommend city physical activity outreach programs that focus on African American mothers and their families. African American mothers should be involved in the program planning to ensure effective outreach to their community. In addition, a policy should be created to designate funds to support physical

activity programs that target minority populations, specifically African Americans.

African American women play an integral role in families. As mentioned in the research, a mother's health behaviors greatly affect her family's health behaviors (Didericksen & Berge, 2015; Grossklaus & Marvicsin, 2014). It is vital to the benefit of African American families that culturally sensitive programming and policies promote healthy lifestyles.

The recreation centers are a critical community partner. They have a trusted presence in the community, which allows them to engage community residents around important community issues. The center directors can provide ideas or resources to address living a healthy lifestyle for their individual communities. I recommend that this research be extended to all 23 Columbus Department of Parks and Recreation Centers, so it could be used for more targeted activity planning. Each of the recreation centers is charged with the task of serving its respective community.

The removal of obstacles to engaging in physical activity is vital to promoting a healthy lifestyle. However, the major obstacle for many of the study participants was work, which is not feasible to eliminate. One recommendation is that recreation center staff consider using a lifestyle coach to offer support to help mothers manage life responsibilities and self-care. These centers could contract with one in the community or have one of their own staff members achieve certification. Another recommendation is initiating a physical activity accountability system where the women are accountable to a partner to maintain consistency with their physical activity routine as well as create friendships around physical activity. The women mentioned that physical activity

provided a social outlet, so an accountability program would support healthy lifestyle changes and strengthen social support networks.

In addition, recreation center staff could implement incentive-based physical activity reward programs. African American mothers could be rewarded for consistent physical activity participation at the recreation center. The rewards could be for individual participations as well as with family or a friend. A few of the women mentioned that physical activity engagement was a social activity, so a buddy program might motivate these women to be more consistent if they are accountable to friend.

### **Dissemination of Research Findings**

This research may help to provide insight into African American mothers' physical activity attitudes and factors that affect their decision to engage in physical activity. The study findings will be disseminated to the Columbus Department of Parks and Recreation as well as the participating recreation centers. The staff may use the data to develop or enhance existing physical activity outreach to African American mothers. The recreation center leadership may share the information with the non-participating recreation centers for the same reason. The findings will also be shared with other public health professionals through oral presentations and poster sessions. In addition, the research will be submitted for publication in research journals including the *American Journal of Public Health*, *Health Promotion Practice*, *Journal of Behavioral Medicine*, and the *Journal of Community Health*.

## Conclusions

This study provided new insight into the attitudes that African American mothers have about physical activity and the factors that affect their engagement in physical activity. The participants were aware of the overall positive impact that physical activity had on their health. There were numerous reasons why some of these women did not engage in regular physical activity. It is apparent that unanticipated responsibilities affect physical activity engagement. The challenge is maintaining physical activity engagement.

It is important to share the findings from the research with the Columbus recreation centers, because of the potential effect that it could have on their ability to influence African American mothers' physical activity engagement. The research has shown that this population has considerably higher physical inactivity rates than the general population which indicates a need for more physical activity interventions.

The study revealed that the participants were physically active in their younger years, but, when they became parents, their parental and other adult responsibilities became more of a priority than their own physical activity. These participants felt strongly about ensuring that their children were physically active. A few identified the importance of their children seeing them be physically active. Findings from this study could be used to explore how these women could share ideas as they address barriers to engaging in physical activity. In addition, these findings could be used to show how those motivating factors might be used to help them be more consistent in their physical activity routines.

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## Appendix A. Interview Questions

## Interview Questions

Date:

Interviewer:

Interviewee:

1. What is your age?
2. What is your current marital status?
3. What is your current employment status?
4. What is your highest level of education?
5. How many children do you have and how many of them live with you?
6. Describe your living situation, who lives with you?
7. Can you describe what physical activity means to you?
8. During the past 7 days how many days did you participate in moderate physical activity like running, walking briskly, fitness class or exercise DVD?
9. How much time do you usually spend when you do moderate physical activity?
10. What role do you think physical activity play in your overall health?
11. What role does physical activity play in your life?
12. What role does physical activity play in your family's life?
13. What types of things keep you from engaging in physical activity?
14. What types of things motivate you to engage in physical activity?

## Appendix B. Interview Protocol

Date:

Interviewer:

Interviewee:

1. Introduction of researcher to participant.
2. Describe the research and the type of information that will be collected to participant.
3. Discuss informed consent form and obtain participant signature.
4. Explain the interview process, including time length of interview, to the participant.
5. Inform the participant the interview will be recorded to ensure accuracy of information.
6. Inform the participant the interview is voluntary, and she has the right to stop the interview at any time.
7. Inform the participant she will receive a hard copy of her interview for quality control purposes.
8. Inform the participant that all information given in the interview will remain confidential as stated in confidentiality agreement.
9. The interviewer will begin the interview process with the interviewee.
10. After the final question has been answered, the interviewer will give a thank you statement that will officially end the session.

## Appendix C. Confidentiality Agreement for Research Participants

## Confidentiality Agreement

**Name of Signer: Nichole L. Glover**

During the course of my activity in collecting data for this research “**The Factors That Influence Physical Activity Among African American Mothers at Recreation Centers,**” I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must remain confidential and that improper disclosure of confidential information can be damaging to the participant.

By signing this Confidentiality Agreement, I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant’s name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices that I am officially authorized to access, and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

By signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_