


2016

# African American Single Mothers' Perceptions of Physical Activity

Sheryl Lynn Richard  
*Walden University*

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# Walden University

College of Health Sciences

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Sheryl Richard

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2016

Abstract

African American Single Mothers' Perceptions of Physical Activity

by

Sheryl Lynn Richard

MA, University of Phoenix, 1999

BS, University of Nevada Las Vegas, 1989

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Services

Walden University

May 2016

## Abstract

Insufficient physical activity detracts from healthy living and has a disparate impact on African American women and their female children. The extensive body of prior research addressing preventable chronic disease and other consequences of insufficient physical activity includes limited information specific to African American single mothers. The purpose of this descriptive phenomenological study was to gain an understanding of African American single mothers' perceptions of physical activity. Specifically investigated were African American women's familial influences and potential effects of these influences on their children's health behaviors. The health belief model served as the theoretical framework for this study and provided a contextual lens to explore research questions to elicit African American single mothers' perceptions of physical activity. Six African American single mothers participated in semistructured interviews that produced data for this study. Use of Colaizzi's data analysis method revealed thematic single mother reports of healthy lifestyle, social support, resources/education, body/self-image, stress management, fear and embarrassment, motivation/inspiration, and injury/illness as factors affecting their engagement in physical activity. Future research opportunities include exploring multilevel interventions specific to African American single mothers and using common weight-related terminology. Study findings could benefit health educators, administrators, and providers. Positive social implications include improved physical activity and health outcomes for African American single mothers with ultimate decreased health care costs for the U.S. society.

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## Dedication

Giving honor and glory to God Almighty, who is the head of my life and with whom all things are possible, I dedicate this dissertation in loving memory of my mother, Ruby Wilkinson. Your love, teaching, guidance, support, and example of a Godly woman inspired me to be, do, live, and give my best. Your legacy of love lives on forever. I would like to thank my father, Charles Wilkinson, Jr., my siblings, and my close friends who love and have faith in me, encouraging me to pursue my dreams. I extend heartfelt thanks to my precious children and grandsons, Yashica (Joshua), Natalia, Nehemiah, Joshua, Jeremiah, Cameshia, and Curtis II. Your compassionate love, hugs, patience, encouragement, and support will always be wind beneath my wings. To each of my loved ones, I thank you for being at my side throughout this transformational doctoral journey. Believing that knowledge is power and love covers all, I humbly dedicate this dissertation to each of you and to the single mothers whose participation and input made completing this research possible.

## Acknowledgements

There is truth to the adage that it takes a village to raise a child. I extend that concept toward my dissertation journey as it took a village to see me through completion. My heart is grateful for the love, support, and encouragement received from family, friends, and colleagues. I thank each of you.

I would like to extend my gracious appreciation to my dissertation committee members for sharing their knowledge, expertise, guidance, encouragement, and support throughout this life-changing dissertation journey. I thank my Chairperson and Content Expert, Dr. Earla White, for her compassion, patience, extraordinary mentorship, and guidance throughout my dissertation process. Her expertise and feedback helped me to produce a high quality dissertation. I would also like to thank my Committee Member and Methodology Expert, Dr. Cheryl Anderson, for her caring approach to sharing her exemplary knowledge, expertise, and support during this process. In addition, I would like to extend gratitude to my University Research Reviewer, Dr. Loretta Cain, for her stellar guidance and support. In addition, I acknowledge and thank each of the single mothers who selflessly provided input and the supporting community organizations that contributed to the success of my dissertation.

Likewise, I humbly thank my Wellcoaches School of Coaching colleagues, serving under the trail-blazing, visionary leadership of Margaret Moore and extraordinary operational mentorship of Erika Jackson, for your compassionate guidance, encouragement, and support. Each person in our Wellcoaches family helps me to be my

best self, live my best life, give abundantly, and guide others to do the same. Thank you for allowing me such warm, nourishing, and inviting space to learn, grow, and share. Together, we thrive and affect sustainable positive social change.

Finally, I offer heartfelt thanks to my spiritual parents and mentors, Pastors David and Vicki Shearin, for exemplifying what it means to be “in Christ.” You taught me the word of God, to live in faith, and to trust God with all my heart. You demonstrated the love of God for all people, as my mother did. Thank you for continuously reassuring me that I can do all things with Jesus Christ, who is the source of my strength and the love of my life.



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## Chapter 1: Introduction to the Study

### **Introduction**

Physical activity is essential for good health because it provides immediate and long-term health benefits. Conversely, insufficient physical activity is a leading risk factor for mortality and preventable chronic diseases (Cleland, Granados, Crawford, Winzenberg, & Ball, 2013). African American women are among those most disparately vulnerable for insufficient physical activity and therefore have higher risk for preventable chronic diseases (Lemacks, Wells, Ilich, & Ralston, 2013). African American single mothers of low socioeconomic status (LSES) are especially at risk because these women often fulfill the roles of head of household and primary caregiver while also working to provide for their families (Dharod, Drewette-Card, & Crawford, 2011). This suggests that these women's daily responsibilities could both influence their own and their children's health-related behaviors.

Regular physical activity is an essential aspect of living a healthy lifestyle. Insufficient physical activity is among the top 10 leading risk factors for death throughout the world as 25% of adults and more than 80% of adolescents remain insufficiently physically active (World Health Organization [WHO], 2015). Physical activity levels that do not meet current guidelines impose significant financial burden on the U.S. health care system, causing approximately 12% (\$131 billion) of U.S. health care expenditures (Centers for Disease Control and Prevention [CDC], 2014). In addition, physical inactivity is an increasing problem in the United States and leading factor contributing to

chronic health conditions, such as obesity. The American Medical Association (2015) classified obesity as a disease in June 2013 due to recognition of the need for medical intervention that advances its treatment and prevention. Research indicated the adverse health and economic impacts of physical inactivity and its disparate effect on African American women (Lemacks et al., 2013). Many studies have also identified physical activity as a primary factor in preventing obesity, and identified obesity as one of the most prevalent, costly, and preventable health problems in the United States ((Barr-Anderson, Adams-Wynn, DiSantis, & Kumanyika, 2013; CDC, 2014; Lemacks et al., 2013). This study's focus on physical activity was motivated in part by the broader problem of preventable chronic health issues such as obesity.

Despite the known benefits of physical activity, physical inactivity remains a problem as it contributes to poor health conditions. The high rate of physical inactivity among African American women coincides with an increasing obesity prevalence that affects 80% of African American women in the United States (Department of Health and Human Services [HHS], 2010; Lemacks et al., 2013). This national problem of insufficient physical activity and a high incidence of obesity are also increasingly prevalent in the study site of Clark County, Nevada. At the time of this study, approximately 15% of youth (under 18 years old) and 60% of adults engaged in little or no exercise (Southern Nevada Health District [SNHD], 2012); overall, obesity in this county impacts 60% of the adult population and 12% of high school students (CDC,

2013). These factors led to a specific focus on African American women in a targeted region of Clark County as the study group.

It is important that medical professionals and African American women share a common understanding of weight-related health issues facing these women and possible ways for resolving the issues. However, research has indicated that some African American women have viewpoints and definitions of weight-related issues (e.g., physical activity, obesity body size and image, etc.) that differ from colloquial meanings (Lynch & Kane, 2014). It is, therefore, important to increase understanding of what such issues mean to African American women. These women's familial influences are factors in health behaviors, while also influencing prevention or onset of preventable chronic disease among their children through their physical activity and dietary decision-making in the family (Barr-Anderson et al., 2013). This is another reason why the study focused on increasing understanding of what weight-related issues mean to African American women.

The literature review for this study revealed limited extant research regarding physical activity as a contributing factor to preventing chronic disease among African American women, with less research on physical activity by LSES single mothers. This study was designed in part to address a research gap related to this lack of understanding about African American single mothers' perceptions of physical activity, with particular regard to LSES mothers with female children. This study promotes positive social change by generating findings for use in improving African American single mothers' physical

activity. Another intention is that the study findings would inform the development of health improvement interventions focused on health promotion, health education, increased physical activity, and decreasing preventable chronic disease among multicultural populations.

This chapter includes a study background summarizing literature pertaining to the phenomenon of physical activity among African American women, particularly LSES single mothers, whose female children are most at risk for physical inactivity and resulting weight-related health issues in the future. The background also includes a description of the gap in knowledge that this study addressed and an explanation of the need for the study. This is followed by the problem statement with evidence demonstrating currency, relevance, and significance of the problem; the study purpose; research questions; theoretical framework; nature of the study; and definitions of key concepts. This chapter continues with descriptions of pertinent assumptions, scope and delimitations, limitations, and significance. The last section is the chapter conclusion, which comprises a chapter summary and introduction of the succeeding chapter.

### **Background**

There are many ways and reasons for individuals to incorporate physical activity into each day. Physical activity provides many health benefits, including increased energy, enhanced sleep and functional health, improved muscular and cardiovascular fitness, and lower risk of preventable chronic disease such as hypertension, heart disease, and diabetes (WHO, 2015). Engaging in some level of physical activity is better than

engaging in none (Carter-Parker, Edwards, & McCleary, 2012). Being active in relatively simple ways throughout the day makes it possible to achieve recommended physical activity levels (WHO, 2015). Engagement in regular physical activity increases chances of living a healthy lifestyle. Insufficient physical activity, on the other hand, is a major source of health and economic burden in the United States (Barr-Anderson et al., 2013). Overall increased engagement in more physical activity could lead to decrease in burden on the United States.

Insufficient physical inactivity affects all populations in the United States. However, there is a disparate effect on some ethnic populations; African Americans are approximately 16% less engaged in some form of physical activity than non-Hispanic Whites (Ickes & Sharma, 2011). Low engagement in physical inactivity is a significant concern among African American women because obesity most disparately affects these women, with a rate of approximately 80% (HHS, 2010). Furthermore, these women's female children make up the population most at risk for future weight-related health issues (Lynch & Kane, 2014).

This problem is not limited to African American women. Although individuals who engage in physical activity live longer than physically inactive individuals (CDC, n.d.), more than one-third of the U.S. adult population is obese or overweight, and more than one-half of the population did not meet recommended physical activity guidelines in 2011 (CDC, 2014; James, Pobee, Brown, & Joshi, 2012). Prior research has identified various reasons for African American women's insufficient physical activity levels

(Eugeni et al., 2011). This research has identified several facilitators and inhibitors of physical activity.

Among the facilitators are physical condition, comfort, social support, education and skills, access to venues for physical activity, and safe environments (Bracy et al., 2014; Eugeni et al., 2011; Mama et al., 2015). Barriers fall within classifications of intrapersonal, interpersonal, or environmental/community (Joseph, Ainsworth, Keller, & Dodgson, 2015) and include domestic responsibilities, financial issues, unsafe environments, absence of a buddy, and lack of social support and encouragement (Peterson, 2010). It is also important to understand African American women's viewpoints and perceptions of weight-related issues and contributing factors, including physical activity (James et al., 2012). Culture plays an essential role in these women's viewpoints and perceptions, influencing their view of body and weight-related issues (Lynch & Kane, 2014). Therefore, culture is another important consideration when addressing weight-related issues among African American women.

African American women's culturally influenced meanings of physical activity differ from those normally held by the medical profession (Eugeni et al., 2011). For example, these women commonly consider household chores, other day-to-day activities, and playing with their children as adequate sources of physical activity (Eugeni et al., 2011). This dissertation study addressed the inadequate research base regarding African American single mothers' perceptions of physical activity, which suggested a gap in literature. In addition, this study was necessary for helping to address the gap in literature

that contributes to the lack of understanding about the perceptions of physical activity among these women as further addressed in the problem statement in the subsequent section.

### **Problem Statement**

Insufficient physical activity exacerbates the broader problem of chronic health disease among African American women. Research has consistently indicated that physical inactivity and low levels of engagement in physical activity are highest among several ethnic minority populations, particularly African American women (Barr-Anderson et al., 2013; Chen & Wang, 2012; McWhinney et al., 2011). Research about how these women perceive and experience physical activity (Barr-Anderson et al., 2013) and other weight-related issues (Lynch & Kane, 2014) is incomplete, however, and could misinform or contribute to ineffectiveness of interventions aimed at helping these women increase physical activity. Though differing from Barr-Anderson et al. (2013), Duncan et al. (2011) identified a link between misperceptions of weight, weight loss, and physical inactivity. Such misperception could indicate lack of adequate research about these women's perceptions. These gaps in the literature created a need and opportunity for additional research.

The research problem was that there is an incomplete understanding of African American single mother's perceptions of physical activity. African American women have a significant familial influence regarding physical activity on their children's health outcomes, and continue to have low levels of engagement in physical activity. The

consequence of these factors is that African American women's female children face disparate effects and are at the greatest risk for preventable weight-related health issues in the future, compared to all other minority groups (Lemacks et al., 2013). Therefore, the research problem aligned with the study purpose.

### **Purpose Statement**

The purpose of this qualitative study was to understand African American single mothers' perceptions of physical activity, with particular regard to mothers of LSES and with female children. Extensive research provided evidence that the onset of preventable chronic diseases such as obesity is an increasingly prevalent health and economic concern for the United States (Lemacks et al., 2013). A plethora of research about physical activity also exists, although minimal research specifically addresses physical activity as the primary factor in preventing obesity and other weight-related preventable disease among African American women. This research gap is ironic because this population has the greatest need for this activity, but engagement in regular physical activity is lowest among ethnic populations, including African Americans (Lemacks et al., 2013). Hence, there was opportunity for additional research specific to African Americans.

For my study, I focused on African American single mothers of LSES residing in Clark County, Nevada. The numbers of insufficiently physically active and obese adults and children in the locality represent a concern (SNHD, 2012). Mothers self-reported the weight and height for each female child. The reported information provided for calculating the body mass index (BMI), which CDC (2012) identified as a primary



indicator of obesity. A BMI at or above the 95<sup>th</sup> percentile of children in the same age and sex is obese (CDC, 2012).

### **Research Questions**

Research questions are fundamental in the design of a study. The following research questions (RQ) contributed to my gaining an understanding of the research problem, helped to focus the study, and to convey the study aim.

#### **Research Questions**

RQ1: What are African American single mothers' perceptions of their experiences of physical activity?

RQ2: What do African American single mothers perceive as facilitators toward their own efforts at physical activity?

RQ3: What do African American single mothers perceive as barriers toward their own efforts at physical activity?

### **Theoretical Framework for the Study**

Theory in this study served as contextual lens for exploring the phenomenon African American single mothers' perceptions of physical activity. In addition, theory shaped the research questions asked in effort to respond adequately to the research problem. Hence, the theoretical framework for this study is the topic of the following section.

## **Health Belief Model**

This study's theoretical framework was based on the health belief model (HBM). The HBM was developed by the social psychologists Hochbaum, Rosenstock, and Kirscht in the early 1950s to explain and predict health behaviors (Ghaffari, Tavassoli, Esmailzadeh, & Hassanzadeh, 2012). The HBM proposes that an individual's beliefs and attitudes about illness and the efficacy of a recommended course of action will predict whether the individual adopts the recommended course of action (Rosenstock et al., 1988). In a weight-related study regarding African American women, the HBM served as a framework for explaining and predicting health behaviors pertaining to the study participant's decision to change or maintain health behaviors (James et al., 2012). Using the HBM constructs has enabled researchers to identify useful themes and patterns for developing culturally appropriate weight management materials for African American women (James et al., 2012).

The HBM was utilized in the present study and research questions in that its constructs of perceived susceptibility, perceived severity, perceived benefits, perceived barriers, self-efficacy, and cues to action offered a means to answer the research questions. Using the HBM facilitated an increased understanding of African American single mothers' perceptions and viewpoints of physical activity. This increased understanding was designed to inform interventions aimed at increasing physical activity and potentially decrease the prevalence of weight-related preventable chronic disease. Accordingly, the subsequent section describes the study nature.

### **Nature of the Study**

This qualitative phenomenological study provided a means for in-depth description of the shared lived experiences of African American single mothers and their perceptions of physical activity. Phenomenology is rooted in the philosophical perspectives of German philosopher, Edmund Husserl, according to Lopez and Willis (2004). Correspondingly, physical activity is the use of energy and the body's major muscles to engage in bodily movement, according to WHO (2014). For their study on perceptions of parents and children regarding barriers of physical activity in rural communities, McWhinney et al. (2011) found that a qualitative phenomenological study worked. The same approach was appropriate for the present study. In a similar study, employment of a phenomenological research design offered an exploratory approach to describe the essence of lived experiences with the phenomenon (Carolan, Gill, & Steele, 2012). Hence, the nature of this study was to explore and describe the perceptions of physical activity from the perspective of the study participants.

### **Sampling**

Criterion sampling, which is a form of purposeful sampling, appropriately aligns with qualitative research (Palinkas et al., 2013). Criterion sampling was appropriate for this phenomenological study as the study participants were those who met the specific, predetermined criterion (Suri, 2011) of having lived experienced with physical activity and, according to Palinkas et al. (2013), therefore represent information-rich cases. This study involved African American single mothers who resided in a limited region of Clark

County, Nevada. Data collection entailed in-depth semistructured, individual interviews with use of a researcher-developed interview guide comprised of open-end questions that answered the research questions.

Telephone interviewing was a possible alternate means for data collection in the event that a participant was unable to participate in a necessary subsequent interview, as indicated in Osei-Assibey, Kyrou, Adi, Kumar, and Matyka (2010). However, no telephone interviews were necessary, and none occurred. Data analysis involved transcription, constant comparison, coding of responses in seeking inductively emergent themes and patterns, in addition to employment of qualitative data analysis and related software. Correspondingly, the following section describes possible information and data sources.

### **Possible Types and Sources of Information or Data**

Various types and sources of information or data were considerable for this study. The participant interest survey and interview responses were the primary information and data sources. Similarly, participant observation, although employed only during the face-to-face interview, offered a possible means for obtaining information. The United States Census Bureau was a source of demographic information. Similarly, Clark County, Nevada and the Southern Nevada Health District were sources of demographic data. These sources provided physical activity and other health-related information specifically pertaining to African Americans in Clark County, including the African American single mothers of focus for this study.

Provision of the following pertinent definitions used throughout this study helped to facilitate understanding the goal of the study.

### **Definitions**

The following definitions help to ensure proper understanding of key terminology used throughout this study.

*African American women:* Individuals who self-identify as a female of the African American ethnic background and are residents of the United States.

*Children/School-aged children:* Children and adolescents between 5-17 years of age. Most children are ready to start learning in a school setting by age 5 and developing a sense of body image by age 6 (National Institute of Health [NIH], 2014), with transition into young adulthood beginning around age 17 (Pringle, Colpe, Blumberg, Avila, & Kogann, 2012).

*Physical activity:* Bodily movement that uses major muscles and requires energy (WHO, 2014).

*Socioeconomic status:* Social standing or class of an individual or group as measured by a combination of income, education, and occupation (American Psychological Association, 2014).

### **Assumptions**

Broad, philosophical assumptions are central to qualitative research. The assumptions and employment of theoretical framework guide the study of the research

problem by addressing the meaning individuals associate with a problem. Hence, the research process evolves from the premise of the interpretive, philosophical assumptions.

Underlying this study was the assumption that collecting data in the natural setting rendered realistic data. Other underlying assumptions pertaining to participant meanings and presenting a holistic and complex viewpoint were present. Among these was the assumption that African American single mothers of female children would want or be willing to share their perceptions of physical activity. Another assumption was that exploring how African American single mothers perceive physical activity could contribute to effective programming of culturally appropriate health improvement interventions that help to increase these women's physical activity levels.

A similar assumption was that study results could inform health improvement intervention that focus on decreasing preventable weight-related chronic disease among African American women and their female children. Additional assumptions related to inductive logic and researcher as instrument, suggesting possible accuracy of researcher-conducted data analysis and interpretation, with results potentially transferrable among other researchers and in other settings. A final assumption related to reflexivity and the notion that being reflexive adequately accounts for potential biases introduced due to my roles as researcher, serving as the primary data collection instrument.

Meaning varies among people. Although researchers indicated that attaining recommended levels of physical activity reduces prevalence of chronic health conditions, no one solution is likely to work for all, which is why culturally-tailoring interventions

down to subgroups (and individuals) prove to be more effective (Lynch & Kane, 2014). Research supporting this notion indicated that African American women view, perceive, and define weight-related issues differently than colloquial meanings (Lynch & Kane, 2014). These assumptions were necessary, as they were the foundation from which this study evolved. Also important was the identification of the study scope and delimitations.

### **Scope and Delimitations**

This study involved collecting data from African American single mothers of LSES, who also had female children, and who resided in Clark County, Nevada. Therefore, the research problem was specific to that group. Populations outside of that group were among those excluded from the study scope. The study involved African American single mothers with female children due to the disparate impact and effect of physical inactivity and its contribution to the rampant increase of weight-related preventable chronic disease prevalence throughout the United States, and specifically in Clark County, Nevada.

The focus was on physical activity while considering the importance of interrelationship with other healthy lifestyle aspects including healthy eating, stress management, conducive sociocultural and physical environments, and supporting policy. Study results are possibly transferrable among other researchers and different participant settings, though not necessarily due to the study nature, variations, and relativity of personal perceptions in addition to the limited intended scope. The transtheoretical model (TTM) of change and social cognitive theory (SCT) did not relate to the area of study

investigated and therefore were not employed. Utilizing the HBM allowed for adequately addressing perceptions, which was core in this study. As related to the study scope and delimitations, the next section addresses study limitations.

### **Limitations**

A significant limitation of this study was that I was the primary data collection instrument, which could have resulted in decreased dependability and introduced biases such as instrument bias. Inadequate researcher reflexivity posed another limitation. I addressed such issues through employing concerted researcher reflexivity, triangulation, member checking (during interviews), and maintaining audit trails. In addition, a limitation was the small sample size of 6-10 participants for the Clark County population of African American single mothers with female children. The research findings, therefore, have limited generalizability, and the small sample size could affect transferability.

A sample size of 6-10 was suggested (Marshall, Cardon, Poddar, & Fontenot, 2013) and acceptable for this study. However, 12-15 participants increases the opportunity for reaching data saturation (Guest, Bunce, & Johnson, 2006), thereby addressing the limitation of small sample size. In addition to the importance of reaching saturation was the importance of not exceeding saturation as doing so could have rendered too much information (Guest et al., 2006; Marshall et al., 2013). Extraneous information could detract from the in-depth, rich data analysis that is fundamental in effective qualitative research (Guest et al., 2006; Marshall et al., 2013). Inability to



generalize the study findings was also a limitation. Accordingly, an essential aspect of a research study is the study significance as explained in the subsequent section.

### **Significance of the Study**

This study possibly implicated social change by rendering data that contributes to increased understanding of how African American single mothers perceive physical activity. Dissemination of study findings may contribute to programming health education and improvement initiatives in communities that aim to provide health education, increase physical activity, and improve health outcomes by helping to prevent weight-related preventable chronic disease among African American women and their female children. Resulting study data could be useful for health service and health education professionals who work with African American women on improving knowledge about health issues, contributing factors, accessing resources and living healthy lifestyles.

African American women have core roles in their families. Considering the influence of these women in their families and culture (Barr-Anderson et al., 2013; Dharod et al., 2011; James et al., 2012), this study might help to effect positive social change on various levels. Mothers, children, other family members, community members, and cultural groups learn and adapt sustainable health behaviors that could lead to social, cultural, environmental, and policy change (Barr-Anderson et al., 2013; Cleland et al., 2013). New knowledge could further contribute to increased physical activity among African American women and among children. This may lead to increased

chances of children growing into healthy adults, while decreasing chances of what Barr-Anderson et al. (2013) and Cleland et al. (2013) refer to as adverse generational impacts of obesity. Community health improvements could further help to minimize the health and economic burdens on the United States (Myrick-Smith, 2012). This may positively influence social change for Walden University Health Services as I become a scholar-practitioner through acquiring the skillset and experience needed for informing and leading dialogue regarding the nation's key health services issues.

### **Summary and Transition**

This chapter introduced the phenomenon of the African American single mothers' perceptions of physical activity. Included in the chapter were background information, specification of the problem statement and study purpose, and the research questions. Also included were an overview of the HBM theoretical framework, study nature, and definitions of pertinent terminology. Additionally provided were the assumptions underlying the study, scope and delimitations, limitations and means for addressing the limitations, and study significance.

Despite the plethora of research about physical activity, it was essential to further research the topic as related to preventable chronic disease and with particular relativity to disparate impact on disadvantaged populations. Research indicated a problem, thus gap, regarding the lack of understanding and severity of health issues related to physical inactivity. Further indicated in research was disparate and increasing prevalence among African American women and their female children.

Chapter 2 comprises comprehensive description of the literature review conducted to support need for this study aimed at increasing understanding about the viewpoints and perceptions of African American women regarding physical activity. Conducting this study addressed the research problem and helped to fill the gap.

Chapter 3 includes a thorough description of the approach for this study. Included is an introduction; the research design and rationale; role of the researcher; the methodology, addressing participant selection, instrumentation, and data analysis; issues of trustworthiness; and ethical procedures. Chapter 4 includes the study results, with the discussion, conclusion, and recommendations covered in Chapter 5.

## Chapter 2: Literature Review

### **Introduction**

Engaging in regular physical activity is an important aspect of living a healthy lifestyle. The more physical activity an individual engages in, the greater the potential for experiencing health benefits. Research consistently identified physical activity as means for helping to decrease undue health and economic burden in the United States (CDC, 2014; Eugeni, Baxter, Mama, & Lee, 2011; Mama et al., 2015). A lack of physical activity has a significant adverse effect on ethnic, socioeconomically disadvantaged groups (Cleland et al., 2013; Dharod et al., 2011). Insufficient physical activity and its consequences also disparately affect African American women and their female children (Lemacks et al., Lynch & Kane, 2014; Wells, Ilich, & Ralston, 2013). Given that in-depth research exists regarding physical activity, along with the knowledge that physical inactivity continues to increase, there is opportunity and need for addressing the issue. Further indicated in research was evidence that African Americans are approximately 13% less physically active than their Caucasian counterparts are (HHS, 2010; Lemacks et al., 2013). However, my review of the literature suggested a limited base of research about physical activity and obesity among African American women, with even less evidence pertaining to single mothers in this group.

Many studies purported physical activity as a primary factor in preventing obesity among African American women (Barr-Anderson et al., 2013; McWhinney et al., 2011; Moran et al., 2014). Physical inactivity therefore imposes dire health consequences.

However, African American women continue to have low engagement in recommended physical activity levels that could provide significant health benefits (Barr-Anderson et al., 2013; Cleland et al., 2013; McWhinney et al., 2011). Another factor possibly contributing to African American women's low level of physical activity pertains to their culturally influenced viewpoints and perceptions of weight-related issues (James et al., 2012). Coinciding, research indicated that African American women perceive body size differently than the medical profession, attributing a culturally influenced, larger and acceptable body size image (Chen & Wang, 2012; Lynch & Kane, 2004). The difference in views of body size suggests disagreement among the medical profession and African American women regarding what constitutes overweight and obesity (Lynch & Kane, 2014). The differing views might lead to inappropriately designed health improvement intervention.

Surmised from research, these women might have differing viewpoints about what constitutes physical activity. This could insinuate that these women see themselves as healthier than their healthcare providers do, which could implicate their apparent absence of urgency about adopting healthier behaviors, particularly physical activity. Healthy nutrition is another factor frequently addressed in literature as a significant factor in preventing weight-related health issues while also an area of challenge for African American women (Barr-Anderson et al., 2013; Dharod et al., 2011; Lemacks et al., 2013). Sufficient physical activity engagement and healthy eating habits is core in living a healthy lifestyle.

This chapter comprises a comprehensive summary of current knowledge and identification of a pertinent gap regarding physical activity related to a vulnerable population. Hence, I describe and synthesize current peer-reviewed literature regarding African American single mothers' viewpoints and perceptions of physical activity, a primary though under-researched factor (Barr-Anderson et al., 2013). Mothers of focus for this study resided in Clark County, Nevada, are of LSES, and had at least one school-aged female child. Individual, social/cultural, economic, and physical environment health factors influence physical activity (Komar-Samardzija, Braun, Keithley, and Quinn (2012). Confirmation of this assertion occurred in Dharod et al. (2011). Physical activity is a core aspect in each health determinant.

This chapter begins with a description of the literature search strategy and an explanation of the health belief model, which was the theoretical framework for this study. This chapter continues with research on the social determinants of health that affect physical activity, the phenomena under study; obesity as it relates to physical activity; and nutrition. It also includes a discussion of relevant characteristics of African American women, in general, and African American single mothers of LSES in particular. These characteristics include experiences, viewpoints, and perceptions of physical activity; body size and image, another recurrent theme in the literature; familial influence on physical activity and healthy eating; and the generational impact of familial influence and physical inactivity due to detrimentally low physical activity possible

contributing to the high obesity rate in Clark County, Nevada. I conclude this chapter with a summary entailing discussion, conclusions, and implications for social change.

### **Literature Search Strategy**

I conducted comprehensive, systematic online searches to identify literature about physical activity among African American single mothers, of LSES and with female children. I also searched for pertinent variables of interest. These search efforts continued until I attained information saturation. The databases searched included SAGE Research Methods Online, PsycINFO, ProQuest Central, SocINDEX with Full Text, and PubMed. I also search related websites including the U.S. Department of Human Services, World Health Organization, Centers for Disease Control and Prevention, National Institute of Health, HealthyPeople.gov, Boston University School of Public Health, and Clark County, Nevada. The search engines used included Google Search, and Google Scholar. Search terms and keywords included *African American, Black, women, single mothers, physical activity, exercise, physical education, overweight, obesity, body size, body image, health beliefs, health belief model, spirituality, culture, perceptions, socioeconomic status, health determinants, qualitative, phenomenology, purposive sampling, and criterion sampling*. Searches were limited to literature published from 2010-2016 that was peer-reviewed, contemporary, full-text, and English.

Journals searched included *International Journal of Behavioral Nutrition and Physical Activity, Journal of Physical Education, Health Promotion Practice, Preventing Chronic Disease, Women's Health, Journal of Religion and Health, Obesity Reviews,*

*Psychology & Health, ABNF Journal, PLoS One, The Lancet, JAMA Internal Medicine, Clinical Medicine & Research, American Journal of Community Psychology, Health Psychology, Childhood Obesity, BMC Public Health, Public Health Nutrition, Health Education & Behavior, International Journal of Environmental Research and Public Health, Journal of the Academy of Nutrition and Dietetics, Journal of Primary Prevention, Health Promotion Practice, Journal of Community Health, Journal of Obesity, Journal of Child Healthcare, and Health Education Research.*

These search efforts revealed more than 100 articles. The articles included scientific studies, systematic reviews, meta-analysis, and dissertations. I removed articles that I determined to be irrelevant due to lack of adequate focus on constructs or points of interest pertaining to the current study. The primary research articles covered the topics of physical activity, obesity, nutrition, African Americans, women, adolescent physical activity and obesity, socioeconomic status, viewpoints and perceptions of African American women, body image and size, qualitative methodology, sampling, health determinants, and the theoretical framework.

### **Theoretical Foundation - Health Belief Model**

A group of social psychologists at the U.S. Public Health Service in the early 1950s developed the health belief model (HBM) in order to understand why people fail to receive preventive health services and health screening tests for early disease detection (Rosenstock et al., 1988). HBM is a health behavior-related change model that addresses why individuals adopt or reject new health behavior or a recommended course of action



(Rosenstock et al., 1988). Since Rosenstock's comprehensive review in 1974, the model continues to be a significant focus of theoretical and research attention (Janz & Becker, 1984). As a result, the HBM was an appropriate choice for the theoretical framework for the present study.

The HBM posits that an individual's beliefs and perceptions about the threat of a disease and the effectiveness of a recommended strategy will predict whether the person will adopt or reject the health behavior (James et al., 2012). Foundational in the HBM are two health behavior-related components: a desire to avoid becoming ill (or becoming well if illness is present) and a belief that taking a particular healthy course of action will prevent or cure illness (Rosenstock et al., 1988). The course of action an individual takes depends upon the individual's perception of the benefits and barriers associated with the health behavior (Oyekale & Oyekale, 2010). The HBM serves as a framework for conceptualizing these perceptions related to activities such as engaging in regular physical activity.

The HBM is comprised of six constructs: 1) perceived susceptibility, 2) perceived severity, 3) perceived benefits, 4) perceived barriers, 5) cues to action, and 6) self-efficacy. The first four constructs represent the original tenets of the model, with the latter two added as the model evolved (James et al., 2012; Janz & Becker, 1984; Rosenstock et al., 1988). As related to this study, perceived susceptibility pertained to an individual's perception of the risk of becoming ill, thus as result of physical inactivity. Perceived severity referred to an individual's perception of the seriousness illness.

Perceived benefits referred to an individual's perception about the degree to which the healthy behavior will minimize the threat of becoming ill. Perceived barriers, the construct proving to be the most powerful across various study designs and behaviors, according to Janz and Becker (1984), represent an individual's perception of the obstacles that preclude taking a recommended course of action. Orji, Vassileva, and Mandryk (2012) offered a different view, stating that self-efficacy is the strongest health behavior determinant, as confirmed in its predictive utility.

Cues to action stimulate the decision-making process of taking on a recommend action (Janz & Becker, 1984; Lynch & Kane, 2014; Rosenstock et al., 1988). An example of a cue to action is an individual experiencing unusually extreme sweating, which encourages them to seek medical service (Rosenstock et al., 1988). Self-efficacy represents an individual's confidence in ability to carry out a health behavior, for example, increasing physical activity, after stimulation of a cue. Hence, a cue to action prompts an individual's engagement in changing a behavior. The individual's self-efficacy influences the approach to making the change. An individual with a strong sense of self-efficacy will approach the change with the belief that successfully making the change is attainable.

Some African American women are reluctant to participate in weight-loss programs and have a low success rate when participating. James et al. (2012) investigated this phenomenon in a qualitative study of the successful development of tailored, culturally appropriate weight management materials for African American women. The

researchers employed HBM constructs of perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. They also identified cues to action as important when working with cultural groups that use differing definitions and have differing views of weight-related issues as compared with those of the medical profession (James et al., 2012). The same concept is applicable to for addressing the topic of physical activity.

Studying a similar topic, Lynch and Kane (2014) assessed perceptions of body size among African American women, using culturally derived norms for body size. The researchers sought distinction between two explanations for weight underestimation in African American women, which were self-preservation bias and differing cultural norms regarding body size. However, the main study goal was to increase understanding of how African American women define terms for body size without factoring in their own weight. The researchers conducted focus group interviews, using a convenience sample of overweight African American women interested in losing weight. Lynch and Kane's use of the HBM allowed for identifying themes and patterns within each of the HBM constructs for use in developing culturally appropriate weight management materials for African American women. They specifically identified cues to action as important when working with cultural populations that have differing definitions of weight-related terms, such as *physical activity*, *overweight*, and *obese*.

The research design used by Lynch and Kane (2014) entailed thematic analysis, content transcription, and in-depth reviews of transcripts. Their findings indicated that

using cultural body size norms, rather than self-preservation bias, leads to weight misperceptions. Lynch and Kane (2014), therefore, corroborated prior evidence of the importance of perceptions when addressing weight-related factors such as physical activity (Barr-Anderson et al., 2013; Bethancourt, Rosenberg, Beatty, & Arterburn, 2014; Bracy et al., 2014; James et al., 2012). The study also contributed further documentation affirming significant discrepancies in the meaning of body size, which could result in weight misperception due to the use of culturally derived and accepted meanings of body size versus the medical definitions. Lynch and Kane's (2014) study limitations included a small sample size of only 69 African American women and their reliance on self-perception as measurement of beliefs regarding body size. The same study was helpful in determining an appropriate sample size for the present study.

The HBM offered a theoretical framework for this study as it afforded application of the constructs in addressing the research questions and helped with grasping understanding of African American women's perceptions of physical activity. The TTM and SCT are pertinent and frequently employed frameworks for health behavior-related studies and/or involving multicultural populations (Annesi, Unruh, Marti, Gorjala, & Tennant, 2011; Rosenstock et al., 1988), though not utilized for this study due to focus on exploring perceptions. It is important to understand African American's women's perceptions in order to address their reluctance to engage in (and motivating factors for) recommended physical activity. Such information could implicate social change by informing the programming of culturally appropriate interventions aimed at increasing

physical activity, thus helping to prevent chronic health issues (Barr-Anderson et al, 2013; James et al., 2012). This deduction aligns with the Glanz and Bishop (2010) finding, in researching the role of behavioral science theory and programming public health interventions, that the HBM is relevant to interventions for which the focus is on minimizing risk factors for chronic diseases. The HBM is, therefore, relevant for the present study.

Aligning with the Cooper, Cotton, and Fleischer (2012) research, which entailed exploring lived experiences with the phenomena of learning qualitative research among students and increasing understanding of the students' perceptions regarding the learning process, applying a qualitative phenomenological approach for this study provided for employing each of the six HBM constructs. The constructs afforded exploring the perceptions of physical activity among African American single mothers of LSES and with female children. A qualitative approach also worked for McWhinney et al. (2011) in exploring perceptions of parents and children regarding barriers of physical activity in rural communities. Employing the HBM for the study supported the use of themes and patterns generated for each theoretical construct for consideration in development of weight-related educational materials and weight-related programs that include culturally influenced factors, such as body image.

Correspondingly, the health belief model was foundational in analyzing factors that influence undertaking of human immunodeficiency virus (HIV) testing and risky health behavior change among Nigerian single youth (Oyekale and Oyekale, 2010). The

researchers suggested that access to accurate information about transmitting and preventing HIV contributed to some form of health behavior change that decreased vulnerability. This was important as decreased vulnerability contributes to decreased risky health behavior, and importance of understanding the factors motivating safer-sex behavior predicates decreasing HIV transmission. The notion of decreased vulnerability related to the present study in that having received accurate information could positively affect African American women's perceptions of and willingness to increase physical activity.

According to the researchers, the HBM historically predicted whether an individual would practice healthy behavior, which required determining the individual's perception of the disease, identifying factors influencing health behavior modification, and the probability that the individual would take some form of action. Such prediction was also applicable for the present study. Similar to applying the six HBM constructs to explore African American single mothers' perceptions of physical activity, the researchers applied HBM-related elements of AIDS knowledge, perceived susceptibility to HIV contraction, perceived effectiveness of HIV-prevention practices, self-efficacy, perceived barriers to health behavior change, and access to health care and social support for engaging in safer sex behavior. Not mentioned was perceived severity, though applicable for this study.

Application of the HBM in Oyekale and Oyekale (2010) revealed that access to health care, social support, and accurate information are the predictors of reducing HIV-

related risky health behavior. This finding indicates that AIDS promotions must foster the perception of significant social support and education for positive HIV-related health behavior change. Other findings were that access to accurate information is powerful in HIV/AIDS campaigning and reducing HIV infection and that knowledge regarding means of HIV transmission influenced proper condom use. In alignment, James et al. (2012) and Lynch and Kane (2014) found that ensuring access to social support and accurate information in interventions as key for African American women. Important in this finding is that access to social support and accurate information could predict risky health-related behavior such as physical inactivity and lead to increased engagement in regular physical activity of African American women and their female children.

The HBM is further useful for identifying other factors contributing to unhealthy weight, such as fatigue and low energy (James et al, 2012). Similar to research substantiating the importance of identifying influential factors for physical activity levels among African American women with diabetes (Komar-Samardzija et al., 2012), understanding African American women's viewpoints and perceptions of physical activity calls for recognizing the factors that affect these women's physical activity levels (Barr-Anderson et al. 2013; James et al., 2012). Despite HBM strengths and serving as an appropriate theoretical framework for the present study, the model has two main limitations (Cheney and John, 2013). Firstly, low prediction capacity of the variables, combined with small effect size of each variable, limits the models utility in public health (Cheney & John, 2013). A second limitation is the lack of clarity about rules regarding

the interrelationships among the individual variables (Orji et al., 2012). To address or account the two limitations, many researchers have adapted and extended the original model to include other variables representing determinants of health, such as self-efficacy and cues to action (Orji et al., 2012).

Other HBM limitations are lack of addressing health behavior habits and environmental factors that influence decision to take action (Jaber et al., 2011). Accounting for these limitations is possible through integrating the HBM with other theories, including the TTM and/or SCT, which contributes to a comprehensive framework that addresses health behavior change from an ecological standpoint (Mama et al., 2015; Versey, 2014). Thus, recognizing the role and importance of health determinants, the following section addresses a broader perspective of social health determinants.

### **Social Determinants of Health**

Making behavior health changes can be difficult for some populations. Adopting a healthy behavior could mean giving up a behavior that has been habitual for an extended period of time (Versey, 2014). Within African American populations, health-related behaviors such as eating and exercise habits often depend upon cultural values, attitudes, and beliefs in addition to expectations of family members, friends, and others in the respective cultural or familial circle of influence. Thus, various factors affect African American women's physical activity levels and overall well-being (Benthancourt et al.,



2014; Golden & Earp, 2012). Healthy living conditions provide for healthy, physically active people while also requiring policies that support living healthy lifestyles.

Social determinants of health include sociocultural, economic, and physical environment, representing the environments in which people carry out their daily lives (HealthyPeople.gov, 2015; Rentfrow et al., 2013). Income, education, social support systems, (particularly family and friends among African American women), sense of community, health care (HealthyPeople.gov, 2015), and body image comprise the determinants and contribute to improved health outcomes (Rentfrow et al., 2013). Contrarily, health determinants could place some disadvantaged populations, particularly African American women of LSES, at risk for adverse outcomes (Franzini et al., 2010; Rentfrow et al., 2013). Walking, for example, is a commonly exercised means of physical activity among African American women that requires access to opportunities to walk, such as buddy or walking programs (absent of barriers such as lack of childcare). However, some physical environments present barriers, as they are not conducive to walking due to lack of safe walkways, in climate weather, and community design (HealthyPeople.gov, 2015; Joseph et al., 2015; Komar-Samardzija et al., 2012). Lack of education, support, and other conditions at various levels affect physical activity level even with a physical environment that is supportive of physical activity,

In a systematic review of qualitative studies exploring the effect of the physical environment on physical activity among older adults, Moran et al. (2014) suggested that socioecological models emphasize the need for interventions that address physical

activity at multiple levels. A related finding is that the social and physical environments are key contributing factors to increasing physical activity (Bauman et al., 2015; Mama et al., 2015). Further addressing multilevel aspects of physical activity, Komar-Samardzija et al. (2012) studied factors related to physical activity levels in African American women. The researchers quantitatively examined factors related to levels of physical activity among African American women with type 2 diabetes. The researchers focused on the effect of the health determinants on physical activity for these women, noting that social/cultural context, economic conditions, and the physical environment influence the physical activity level among African American women (Komar-Samardzija et al., 2012). Findings were that higher self-efficacy for physical activity, social support, and minimizing physical environmental barriers could help to increase physical activity among African American women (Komar-Samardzija et al., 2012). Based on the literature reviewed, I deduce that these women's increased belief in their ability to engage in sufficient levels of physical activity could result in the desired outcome.

Understanding how African American single mothers of LSES perceive physical activity involves addressing social support systems, sense of community, sociocultural issues, and body image (Komar-Samardzija et al., 2012). Increased understanding of perceptions predicates development of effective, culturally appropriate interventions that aim to improve health outcomes through increasing physical activity among African American women. Nonetheless, physical activity levels remain subpar while obesity

prevalence continues to escalate therefore warranting addressing the broader problem of obesity, which is addressed in the subsequent section.

### **Obesity Related to Physical Activity**

Over the past couple of decades, obesity has become devastatingly prevalent. An adverse consequence is excessively high health and economic burden in the United States, given that the condition is a preventable risk factor chronic disease (CDC, 2014). Obesity among adults is determined according to body mass index (BMI), which is a measure of body weight (instead of fat) based on a ratio of weight and height, with a BMI of 18.5-24.9 being normal weight, 25-29.9 being overweight, 30-35 being obese, and greater than 35 indicates varying levels of severely to very severely obese (Lynch & Kane, 2014). Child obesity is measurable using the same method, with a BMI of or above the 95th percentile of children in the same age and sex indicating obese (CDC, 2012). Using a BMI calculation provides a means for consistent obesity measurement.

Prevalence of obesity is rampant. More than 30% of the U.S. adult population is obese, according to CDC (n.d.) and McCarthy (2014). The CDC advised that 20% of U.S. children are obese, and based on a study looking at the family structure in obesity. Similar findings are that rapidly increasing childhood obesity is a leading threat to public health (Formisano, 2013), and there is a link between school-aged children and risk of obesity and heart disease in adults (NIH, 2014). Yet, obesity prevalence continues to increase (CDC, 2014). Physical inactivity and poor eating habits are among the primary causes of the rampant increase within the past couple of decades are (CDC, 2013;

McWhinney et al., 2011). Raising awareness is an apparent step toward combatting the obesity epidemic; however, the rapid rate at which obesity prevalence is increasing creates urgent need for concerted action (CDC, 2013). About 47% of U.S. adults have at least one risk factor for heart disease (CDC, 2013). Such prevalence indicates the need for increased awareness.

In a study aimed at developing culturally tailored weight-management resources for African American women, James et al. (2012) posited that obesity imposes severe societal health burdens. This burden is particularly troublesome for African American women as they are less likely to participate in weight loss endeavors and in spite of the ongoing struggle with losing weight. Reluctance to participate in weight-loss endeavors possibly relates to African American women's inadequate physical activity levels. Aligning with posit of health burdens is Myrick-Smith (2012) substantiation of adverse health and economic impact of obesity. In agreement, James et al. (2012) expounded, noting that African American women experience lower life expectancy than the general population. This finding represents disparate effect of inadequate physical activity on African American women.

Correlating with the increasing prevalence of obesity among the U.S. populations, including children, is the impact of obesity on residents of Clark County, Nevada. Clark More than 60% of the adult and 12% of the adolescent population in Clark County are obese (CDC, 2013). Hence, it is imperative to conduct further research that could help to reduce chronic health issues such as obesity through increasing understanding of physical

activity as a known factor in helping to prevent weight-related chronic disease (Barr-Anderson et al., 2013). Health behavior coincides with these women's perceptions of weight-related issues (Lynch & Kane, 2014), which influences their eating and physical activity choices. Hence, physical activity is the topic discussed in the following section.

### **Physical Activity Among African American Women**

There are various ways to engage in physical activity as a daily routine. Engaging in physical activity affords a range of health benefits, some as straightforward as increased strength, improved flexibility, and better sleep. Physical activity is a primary factor in preventing chronic health disease in addition to losing weight or sustaining a health weight, yet approximately 52% of U.S. adults did not meet CDC recommended physical activity guidelines in 2011 (Blair & Powell, 2014; Buchner, 2014). The guidelines call for 150 minutes of moderate to intense levels of aerobic activity (e.g., brisk walking) per week and major muscle-strengthening activity on at least two days per week (Blair & Powell, 2014; Buchner, 2014). Activities are achievable in at least 10-minute increments (Blair & Powell, 2014; Buchner, 2014).

A second option is to engage in 75 minutes of vigorous to intense aerobic activity (e.g., jogging or running) in addition to major muscle strengthening activities (Blair & Powell, 2014; Buchner, 2014). Another option is a mix of the aforementioned two options (Blair & Powell, 2014; Buchner, 2014). People who are physically active have lower risk of developing chronic illnesses and live longer than those who are physically

inactive (James et al., 2012). This assertion exemplifies the importance of physical activity.

However, the prevalence of physical inactivity remains problematically low among African American women and their children, even with the extensive, plausible research base for physical activity as a fundamental factor in preventing chronic health issues. Inadequate physical activity possibly results, at least partly, from limited research for African American women, especially those who single mothers of LSES. In a study aimed at exploring the perceptions of and experiences with barriers to exercise and healthy eating among primarily African American women residing in disadvantaged neighborhoods, Baruth, Sharpe, Parra-Medina, and Wilcox (2014) suggested that African American women who fall within multiple categorical or subgroups (e.g., overweight, ethnic, LSES, residing in disadvantaged neighborhood, etc.) are minimally researched. This could indicate merit for future research and more culturally specific interventions to address the needs of these women.

Correlating with Cleland et al. (2013) identification of physical inactivity as the fourth leading cause for mortality (due to contribution to preventable chronic disease), Lynch and Kane (2014) suggested that African Americans are most vulnerable for obesity. Noting similar findings, Dharod et al. (2011) reported African Americans as demonstrating the slowest rate in reducing risk factors for chronic diseases, meaning that this group could benefit from more effective healthy improvement intervention that involves engagement in physical activity. Correspondingly, African Americans (48.8%)

tend to be less engaged in some form of physical activity than their non-Hispanic Whites (64.9%) counterparts, according to Ickes and Sharma (2011). Researchers have identified appropriate and effective interventions, in addition to, understanding how African Americans experience, view, and perceive physical activity, as essential factors affecting engagement in physical activity.

The limited research about how African American women perceive physical activity possibly contributes to the low levels of physical activity among these women. Hence, there is minimal research aimed specifically at increasing understanding of African American women's perceptions of physical activity (Ickes and Sharma, 2011), which represents a gap in the literature, thus an opportunity for additional research. Similarly, though divergent from Barr-Anderson et al. (2013), Duncan et al. (2011) found that there is an association between misperception about weight and weight loss and physical inactivity. This finding represents an under-researched area pertaining to these women's perceptions.

Understanding African American women's experiences with and perceptions of physical activity allows for identifying barriers, facilitators, and cues to action. Barriers to daily physical activity, with particular reference to rural, economically disadvantaged areas, represented the topic researched in Chen and Wang (2012) and McWhinney et al. (2011). Both sources identified barriers to physical activity as related to financial and safety concerns, with facilitators such as health education, exercise skills development, and use of proper home exercise equipment (Chen & Wang, 2012; McWhinney et al.,

2011). Another research finding was that health conditions is a recurrent theme addressed in studies due to its role as both a barrier and a motivator for physical activity, meaning that health conditions represent cues to action (Bethancourt et al., 2011). For example, receiving diagnosis as overweight or desiring to maintain a healthy weight status could motivate an individual to exercise regularly and eat healthy foods. Contrary to the more commonly identified barriers previously mentioned, Bracy et al. (2014) examined links between safety concerns and engagement in physical activity. While the results did not support significant relationship between crime and safety concerns and favorable physical activity, evidence consistently supported relationship between pedestrian safety and physical activity such as leisurely walking.

Though different, another study entailed focusing on barriers while seeking perspective about the beliefs and health habits of African Americans (Eugeni et al., 2013). The researchers suggested, and Joseph et al. (2015) corroborated, that barriers to physical activity among African American women are as much personal preference as they are due to social and environmental inhibiting factors (Eugeni et al., 2013). Among personal barriers were physical condition, comfort, and ability to perform physical activity while limited minimal access to physical activity resources and opportunities represented environmental barriers (Eugeni et al., 2013; Joseph et al., 2015). In addition to identification of time constraints as a barrier to physical activity, need for purposefulness was as a facilitator of physical activity, according to Carter-Parker et al. (2012). The same source further suggested expanding the definition of physical activity



to include housework, work-related physical activities, and leisure sports-related activities in order to represent a more inclusive measurement of physical activity prevalence, and indicating that some activity is better than no physical activity. This perspective is particularly applicable for African American single mothers. In evaluating the *Heart and Soul Physical Activity Program by African American Women*, Eugeni et al. (2013) identified spirituality, prayer, and church as sources of encouragement for physical activity. This source validated time constraints due to competing demands on time as a barrier, crediting lack of time as the biggest barrier to physical activity. Additional barriers noted are family and work demands, fatigue, financial issues, lack of motivation, unsafe areas, absence of facilities, and lack of cultural acceptance (Peterson, 2010). Other barriers might include fear and embarrassment.

Absence of access to physical activity facilities (compelled by lack of public transportation) along with personal and preferential considerations, such as intimidation, personal experiences with physical activity, and disinterest in physical activity are among suggested reasons for physical inactivity (Eugeni et al., 2013). Preferences included physical activity completed as the result of fulfilling daily activities (for work and home/family, such as chores and activities with children), walking (Eugeni et al., 2011; Franzini et al., 2010), and dancing. Many years of personal and professional experience with African American women were the basis for identifying these preferences. Feeling insecure about appearance, embarrassment about body size, inability to properly exercise, being discouraged by perceived competitive atmospheres, (Bethancourt et al., 2011), and

frustration due to time and cost associated with hair upkeep are among the personal experiences with physical activity (Versey, 2014). There are many benefits to engaging in sufficient levels of physical activity, in spite of the potential barriers faced.

Disadvantaged populations in rural areas are aware of the barriers to physical activity but feel unable to overcome the barriers (McWhinney et al., 2011). This counters the essence of self-efficacy, which many studies identified as the strongest construct in various health behavior theories (Rosenstock et al., 1988). However, Lynch and Kane (2014) proposed a different perspective, suggesting definitions of body size as a barrier due to ineffective communication between patients and health care providers. Similar to findings in various studies, Bethancourt et al. (2014) identified enjoyable buddy or group activities (companionship), social interaction and support, as motivators for physical activity.

Cleland et al. (2013) and Dharod et al. (2011) share similarity in that both studies involved examining effectiveness of interventions that promote physical activity among women of LSES, as are the participants toward which this study focused. Dharod et al. (2011) differed due to focus on mothers in rural areas as are the African American single mothers targeted in the present study. Access to safe, affordable, desirable physical activity venue, particularly useable walkways, is crucial for encouraging physical activity and for the well-being of rural residents (McWhinney et al., 2011). An appropriately designed health improvement initiative should address affordability and environmental safety.

Literature reviewed for the present study revealed that, in programming tailored, culturally appropriate interventions, it is imperative to understand physical activity from the viewpoints and perspectives of African American women. This is necessary for effectively helping these women to progress from sedentary lifestyles of physical inactivity to becoming physically active with healthy eating habits as addressed in the next section about nutrition.

### **Nutrition**

Nutrition is a well-researched area related to physical activity, and importantly, an integral aspect of living a healthy lifestyle. Equally important is the fact that healthy nutrition provides bodily energy needed for engaging physical activity. Although there are benefits to engaging in solely physical activity or healthy eating, Dharod et al. (2011) researched development of a community-based physical activity and nutrition intervention for LSES mothers in a rural area. The intervention purpose of the interventions was to increase motivation for physical activity and fruit and vegetable intake. The researchers suggested that nutrition and regular physical activity are necessary for living healthy lifestyles. Deduced from this suggestion, physical activity and nutrition interrelate to produce greatest health benefits.

In researching physical activity, dietary habits, and obesity Eugeni et al. (2011) and Ickes and Sharma (2011) corroborated the interrelation of physical activity and nutrition by emphasizing consideration of multidimensionality of health behaviors, healthy nutrition, and physical activity in preventing obesity. As with physical activity,

culture contributes to the challenge of healthy eating due to its influence on the dietary choices and habits of African American women (Barr-Anderson et al., 2013; Formisano et al., 2013). This is partly due to importance of culture, social relationships, and familial roles of African American women (Baruth et al., 2014). Another reason why nutritional eating is challenging is that it is difficult to maintain cultural customs about food and eating (e.g., including succumbing to pressure by family and friends to eat more; Baruth et al., 2014). In addition, lack of access to healthy food sources; adequate knowledge about which foods are healthy; healthy meal preparation skills; and support for healthy eating (Dharod et al., 2011; Lemacks et al., 2013), indicate the need for interventions that facilitate increased access to healthy eating opportunities. Nutrition and physical activity represent core, connecting factors that contribute to overall well-being and help to prevent weight-related diseases.

Hence, there is need for multidimensional-level intervention focused on reducing barriers (Joseph et al., 2015), facilitating sustainable behavior change, and increasing access to fruits, vegetables, and physical activity opportunities for mothers of LSES (Dharod et al., 2011). Cultural-related ideals is an important factor for consideration in developing weight-related materials and programs for African American women since these women's ideal body sizes are typically larger than that of other women (Baruth et al., 2014). Essentially, desirable outcomes other than a smaller body could serve as stronger motivators (Baruth et al., 2014). It is important to understand African American

women's viewpoints and perceptions about weight and body-related factors could help to identify effective motivators.

### **African American Women's Viewpoints, Perceptions, Body Size, and Image**

The importance of physical activity in healthy weight and preventing chronic health issues is a well-researched topic. However, there is limited research specifically regarding African American women, the group most disparately affected by obesity and whose female children at greater risk of weight-related health issues (Lemacks et al., 2013; Lynch & Kane, 2014). This suggested a potential generational problem and imperative need for increased physical activity to help combat the problem. Aside from evidence that factors, primarily physical activity and healthy nutrition, contribute to preventing chronic health conditions, African American women's viewpoints and perceptions of body size is an area of significance that is worthy of further consideration and addressing (Lynch & Kane, 2014). It is possible that these women's views and use of cultural definitions of body size contribute to unhealthy decisions that result in their physical inactivity.

African American women's consideration of weight-related definitions ascribed by medical professionals could help to increase physical activity, although the reality is that these women have differing views, which necessitate understanding. Endeavoring to develop tailored, culturally appropriate weight-management materials for African-American women, James et al. (2012) reported results consistent with findings in Lynch and Kane (2014) and Duncan et al. (2011). The researchers noted the importance of

understanding African American women's viewpoints and perceptions of weight-related issues and contributing factors. This suggestion implied that, while physical activity is vitally important in preventing weight-related illnesses, there are underlying factors that significantly influence decisions regarding engagement in physical activity, as is the case with African American women.

Duncan et al. (2011) expounded to express the importance of addressing inaccurate misconceptions regarding weight in weight-loss endeavors in order to facilitate appropriate modification of health behaviors. Understanding these women's experiences with and decisions regarding physical activity requires initial understanding of their viewpoints and perceptions. Such understanding could provide for more effective health improvement intervention.

The aim of effective health improvement intervention is to help facilitate adopting of healthy behaviors that lead to well-being, thus absence of chronic illnesses such as obesity. Lynch and Kane (2004) entailed assessing 69 African American women's perceptions of body size, with regard to body size as culturally defined and revealed that the majority of overweight women (with body mass index [BMI] of 25-29.9) and 40% of obese women (with BMI >30) did not self-classify as overweight or obese. Of the women with BMI  $\geq$  35, 65% classified themselves as obese, and 29% did not classify themselves as overweight (Lynch and Kane, 2014). This indicated that these women might have a view of weight-related issues that differs from medical definitions.

The researchers concluded that the cultural definition African American women ascribe to terms for body size may represent a barrier to effective communication between health care providers and patients about body adiposity (Lynch and Kane, 2014). This conclusion aligned with the findings in Duncan (2011). A similar finding was that African American adolescents also associate ideal body image with weight status, healthy food choices, and lifestyle health behaviors (Chen & Wang, 2012). Upholding of their cultural views regarding weight could affect whether and to what degree African American engage in physical activity. For this reason, among others such as safety concerns (Bracey et al., 2014), financial issues, in climate weather (McWhinney et al., 2011), and hair, according to Versey (2014), it is important to understand the experiences, viewpoints, and perceptions with physical activity among African American women (Duncan et al., 2011). This could help with understanding why these women are or are not engaging in regular physical activity.

In turn, such understanding could help with identifying inhibitors of physical activity. Such understanding could inform development of evidence-based health improvement interventions specifically addressing the needs of the targeted groups (Bauman et al., 2012). Hence, the following section provides insight about African American women, in view of single mothers, along with their familial influence and the generational impact of physical inactivity.

## **Familial Influence and Generational Impact of Single Mothers of Low Socioeconomic Status Regarding Physical Inactivity**

Physical inactivity disparately affects African American women and represents a significant factor contributing to weight-related issues among children in the United States, possibly indicating African American mothers' familial influence on physical activity levels. Prevalence of inadequate physical activity levels continues to increase. This is in spite of the recommendation that school-aged children get one hour of physical activity per day (NIH, 2015). Related to inadequate physical activity, childhood obesity rates in the United States increased by approximately 66% over the past 30 years, with higher numbers for African American children among whom the rate approximates 40% (letsmove.gov, n.d., para. 1). Consequently, African American children are 40% more likely to be obese than their non-Hispanic white counterparts (Ickes & Sharma, 2011). As stated by First Lady Michelle Obama at the *Let's Move* launch on February 9, 2010, "The physical and emotional health of an entire generation and the economic health and security of our nation is at stake" (letsmove.gov, n.d., para. 1). This statement attests to the problem severity and indicates that, in addition to the preventable chronic health issues plaguing the U.S. adult population, the disease is increasingly devastating the health and well-being of our nation's children, thus a future generation.

Insufficient physical activity significantly contributes to the childhood obesity epidemic that represents a major public health problem in the United States, according to Chen and Wang (2012). Increasing prevalence of engagement in physical activity and



healthy nutrition are primary factors for curtailing the problem in addition to core elements of the *Let's Move* campaign. This campaign is a comprehensive initiative aimed at diminishing childhood obesity in order to raise a healthier generation of kids.

The obesity problem could escalate from one African American generation to the next. African American mothers' familial influence plays a vital role preventing this from happening. However, minimal research exists for African American single mothers between 18–35 years of age as reported by Barr-Anderson et al. (2013), suggesting absence of appropriate and effective intervention for addressing the problem. Barr-Anderson et al. (2013) indicated and Davison et al. (2013) agreed that single mothers' familial influence could contribute to possible onset of preventable chronic disease, at least partly as the result of the mothers' dietary and physical activity-related decisions in the family.

Health behaviors of these mothers, as demonstrated through their natural example as role models, further influence their children's health and well-being. Because children fundamentally learn in the family environment, taking on attitudes and behaviors of those with whom they live, parents serve as role models for their children. This is with particular regard to assuming and maintaining healthy behaviors, including healthy food choices and engagement in health beneficial physical activity (Davison et al., 2013; Formisano et al., 2013). Parent and child engagement in physical activity and eating healthy foods promotes living of healthy lifestyles.

While exercising healthy behavior is an individual choice, other family members may influence an individual's health behavior choices, particularly in parent-child relationships. In a systematic review of interventions involving families and regarding physical activity, diet, and obesity prevention, Barr-Anderson et al. (2013) focused on African American girls while also having relevancy to single mothers of African American female children. In three of the seven studies pertaining to physical activity, findings validate positive impact of physical activity on behavioral and weight outcomes (Barr-Anderson et al., 2013) while three of the four nutrition-related studies reported no occurrence of expected results. The researchers reported another finding emphasizing the need for culturally appropriate interventions for African American girls that allow suggestions as to whether and how to involve family members (Barr-Anderson et al., 2013). Correspondingly, researchers studied parental role and influence on children's emergent physical activity behaviors, emphasizing the challenges with measuring physical activity parenting, which is the parent's ability to accurately identify and measure physical activity (Barr-Anderson et al., 2013). In addition, the researchers noted challenge with identifying possible solutions, including the linking of physical activity parenting with food parenting and employment of evidence-based theory and models for research efforts. Surmised from these findings is indication of the need for further research to address the challenges.

African American mothers' physical activity often involves their children. In another study, African American mothers noted that a large part of their physical activity

occurs during leisurely time activity time spent with their children as well as their food choices based upon what the children desire (Eugeni et al., 2010). This indicates a sort of concerning role reversal, particularly as related to the current study, since the parent is the decision maker and exerts influence of the children's health behaviors. The situation also suggests opportunity for parental health education.

Similarly, in researching whether parenthood contributes to childhood obesity, Huffman, Kanikireddy, and Patel (2010) reported that children of single parents were significantly more overweight than children in two-parent household, and were 4% more overweight than their counterparts of other ethnicities. This conveys a strong relationship between single-parent status and weight-related issues among their children (Huffman et al., 2010), signifying the importance of healthy behaviors of African American single mothers. The focus of McWhinney et al. (2011) was to increase understanding of barriers affecting physical activity in LSES rural neighborhoods, from the perceptions of parents and their children. Results showed absence of facilities for physical activity as a barrier for parents and children, although other parental concerns were financial and safety related while children expressed concern about household and school responsibilities (McWhinney et al., 2011). These findings could inform development of appropriate interventions aimed at increasing physical activity in addition to illuminating the possibility of interrelationship between parental perceptions and children's perceptions of physical activity. This could be important since exploring perceptions is core in the

present study, and African American female children perceive body image and size differently from females of other ethnicities, as do African American women.

Various factors affect engagement in physical activity. Another related study, conducted by Tandon et al. (2012) entailed determining whether physical activity in home environments varied by socioeconomic status and the effect of home environment mediators, such as television/video screen time, on sedentary behavior of children. Findings were that across socioeconomic status, children spent more time with parents engaged in screen time than engaged in physical activity, with this situation occurring more frequently among parents and children of LSES (Tandon et al., 2012). As a result, parents in LSES home environments provided more opportunities for sedentary time than for engaging in physical activity (Tandon et al., 2012). Surmised from these findings, decreasing screen time could contribute to decreased sedentary time and increased physical activity of both single parents and their children, would be appropriate for the present study.

The types and frequency of parent-child physical activity vary, depending on situations. According to Wright, Wilson, Griffin, and Evans (2010) in qualitatively assessing how parental modeling and social support influence physical activity among minority, low-income adolescents, children reported that parents engaged with their children in various forms physical activity such as walking, basketball, and cycling, though infrequently. Findings suggested sex differences in that female children received more emotional support with negative support for physical activity (e.g., limited to

activities such as playing outside with a sibling; Wright et al., 2010). Boys, however, reported receiving support for physical activity that was more tangible (Wright et al., 2010). An additional finding was that children have and are willing to share ideas for increasing parental social support, especially tangible support for both male and female children (Wright et al., 2010).

An important aspect of these findings is that they confirm familial influence over children's physical activity. These findings further highlight the possibility that, in addition to familial influence affecting physical activity of children, such influence could inhibit or limit physical activity of African American female children, the group most vulnerable for physical inactivity. Although physical activity is a primary means for reducing occurrences of preventive chronic diseases that disparately affect African American women, these women remain among the most physically inactive groups (Barr-Anderson et al. 2013; James et al., 2012). Given that African American women continue to have unacceptably low levels of physical activity despite in-depth research in this area, there is need for further research and intervention.

### **Future Research**

Based on the aforementioned research, there is opportunity for future research. Perceptions of body size of African American women was the focus of Lynch and Kane (2014), which targeted these women because they and their female children are the populations among which weight-related health issues are most prevalent. These women are likely to underestimate their body weight, partly due to cultural norms, and

demonstrate poor weight-management behaviors. This could lead to underestimating health risks and impede prevention of chronic diseases (Lynch & Kane, 2014).

Differently, in a study conducted by Duncan et al. (2011), the researchers sought increased understanding regarding *misperception* of weight-related attitudes and behaviors among obese or overweight. Misperception referenced self-reporting of being underweight or near an appropriate weight, which led to less likelihood that those misperceiving their weight would want to lose weight and meet physical activity recommendations.

There are differences in the two approaches. Lynch's and Kane (2014) research focus was on perception based on self-reported *body image/body size* whereas Duncan et al. (2011) looked at *misperception* based on self-reported *weight* compared with medical-specified weight criteria. Surmised from both studies is the importance of increasing understanding about how African American women perceive their bodies and health in order to plan, implement, and evaluate culturally appropriate health improvement programs that effectively produce desired health outcomes such as healthy eating habits and regular engagement in physical activity (James et al., 2012; Lynch & Kane, 2014). Therefore, an opportunity for future research is to develop better understanding of African American women's ascribed meaning of physical activity. It is important to recognize that because of differences in colloquial and medical meanings, these women may not consider themselves as physically inactive or having weight-related issues. Even with differing viewpoints about weight and body-related factors, it is imperative that

these women have the education, skills, resources, and ability necessary for helping their children to demonstrate healthy behaviors. This is the case for African American single mothers of LSES with female children in Clark County, Nevada.

### **Clark County, Nevada**

The focus pertained to African American single mothers in Clark County in Nevada, an area geographically located in the northeastern region of the City of Las Vegas. Clark County's population is approximately 2 million. This accounts for the majority of Nevada's population of approximately 2.8 million (CCN, n.d.; U.S. Census Bureau, 2013). African Americans comprise 13% and females comprise 50% of the County's population (U.S. Census Bureau, 2013), with African American women accounting for approximately 5% and approximately 62% of these women, leading households with no husband present (CCN, n.d.). Clark County's median household income is approximately \$54,000, though approximately \$37,000 for African Americans (U.S. Census Bureau, 2013). More than 14% of the population lives in poverty (U.S. Census Bureau, 2013). Coinciding with the same issues in the United States, increasing levels of physical inactivity and obesity prevalence among African American women is a growing problem in Clark County, Nevada.

According to CDC (2013), 60% of the adult population and 12% of high school students are obese. A known preventable risk factor for heart disease, physical inactivity contributes to deaths due heart disease, which is among the top two causes of death in Clark County, accounting for 26% of deaths in Nevada (HHS, 2013). The growing issues

of physical inactivity and the related weight-related health issues among African American women and their female children in Clark County and the United States indicates that the problem exists at multiple levels and has become generational.

However, Clark County is taking steps to increase physical activity and decrease preventable health diseases. Initiatives include implementation of annual training for childcare providers on topics of childhood obesity, nutrition, and physical activity; commemoration of Nevada Moves Day, which encourages walking or riding bikes to school; and implementing a physical activity and nutrition policy for after school programs, requiring 30 minutes of physical activity each day (CDC, n.d.). While these actions indicate progress, there is need for attaining increased understanding of African American women's experiences, viewpoints, and perceptions of physical activity since it is a significant factor in decreasing prevalence of chronic health issues among African American single mothers of LSES in Clark County.

### **Summary**

Many studies addressed physical activity as fundamental in preventing chronic health issues. Although, there is minimal research documenting tailored, culturally appropriate interventions that successfully helped African American women to engage in sustainable physical activity rendering notable health benefits and reducing susceptibility to obesity and other weight-related health issues. This indicated the integral need for additional research to understand the experiences and perceptions of physical activity among African American women of LSES, with consideration of culturally influenced



views and definitions for ideal body size, image, and weight status. Health improvement efforts should also consider communities where the social and physical environments are not conducive to physical activity and, therefore, contribute to increased preventable chronic diseases.

This chapter addressed physical activity, the phenomenon under study, as related to the broader problem of obesity, for which U.S. African American women and their female children are most vulnerable. Additionally addressed was these women's familial influence on their children's physical activity-related health behaviors, which potentially imposes a generational impact of chronic health issues. The aim of the present study was to contribute to scholarship through producing results that could inform the programming of culturally appropriate interventions aimed at increasing physical activity among African American women and their female children. Furthermore, the present study could contribute to lessening the health and economic burden on the United States.

Chapter 3 comprises discussion of the research methodology for this study. I provide an introduction to the study and describe the study approach. This chapter includes explanation of the research design and rationale as well as description of the role of the researcher. In addition, I describe the methodology, addressing participant selection, instrumentation, and data analysis. I conclude Chapter 3 with discussion of issues of trustworthiness.

## Chapter 3: Research Method

### **Introduction**

Through this dissertation study, I sought to increase understanding of African American single mothers' perceptions of physical activity, with particular regard to mothers of LSES and with female children. This chapter provides description of the study methodology and addresses the study research design and rationale. Included are presentation of the research questions, definition of the central phenomenon of the study, identification of the research tradition, and rationale for the tradition. Also included are a description of my role as observer, disclosure of any potential personal or professional relationships I had with the study participants, and any other potential ethical issues along with explanation for addressing these issues.

This chapter also includes discussion of the study's descriptive phenomenological design; the use of Colaizzi's seven-step method of data analysis; the participant selection logic; data collection instrumentation; procedures for recruitment, participation, and data collection; and the data analysis plan. The chapter continues with discussion about trustworthiness issues, encompassing credibility, dependability, confirmability, and intra/inter-coder reliability. In addition, it includes an explanation of the ethical procedures followed regarding gaining access to participants and/or data, the treatment of human participants, treatment of data, and other ethical issues.

### **Research Design and Rationale**

This study employed a phenomenological design for describing the central phenomenon of the African American single mothers' perceptions of physical activity, with particular regard to mothers of LSES and with female children. Physical activity encompasses bodily movement that uses major muscles and requires energy (WHO, 2014). It used Husserl's phenomenology inquiry to thoroughly describing, from the perspective of the study participants, the essence of the lived experiences regarding the phenomenon under study. It also only involved individuals who have lived experiences with the phenomenon, as suggested by Cooper et al. (2012) and McWhinney et al. (2011).

A fundamental principle of Husserlian phenomenology is the importance of bracketing, during which the researcher rids consciousness of any previous expertise, knowledge, or personal bias to allow for optimally grasping the essence of lived experiences from the perspective of each study participant (Lopez & Willis, 2004). With bracketing, my goal as researcher was to remain transcendently subjective, meaning continual assessment of my effect on the inquiry with personal biases, assumptions, and presuppositions remaining neutral while not influencing the participants' descriptions (Lopez & Willis, 2004). A second fundamental principle of Husserl's approach is the identification of commonalities among participants' lived experiences, making possible an exhaustive, generalized description (Lopez & Willis, 2004). Husserl's phenomenological approach is useful for revealing essences of lived experiences with a

phenomenon insufficiently conceptualized in prior research (Lopez & Willis, 2004).

Descriptive phenomenology, as used the present study, entails the four consistently identified step of bracketing, analyzing, intuiting, and describing (Wojnar & Swanson, 2007). These steps were:

- Step 1: Bracketing (epoche) - During this step, I set aside any preconceptions about the phenomenon of perceptions of physical activity and achieves transcendental consciousness, which means openness to another person's experience (Wojnar & Swanson, 2007). This allowed for maintaining the rich, in-depth description of the essence of lived experiences with the phenomenon from the participant's perspective and without influence of researcher impositions or existing knowledge about the phenomenon (Wojnar & Swanson, 2007).
- Step 2: Analyzing – Rigorous analysis of the descriptive phenomenon under investigation entailed the seven detailed steps explained in the succeeding Methodology subsection, Colaizzi's Data Analysis.
- Step 3: Intuiting – This step entailed me, as the researcher, acquiring an innate sense of experiencing the phenomenon the same as the participant experiences it. Repeated listening, reading, and reflecting on the data help to develop my intuition as researcher (Wojnar & Swanson, 2007).
- Step 4: Describing – This culminating step involved presenting an exhaustive description of the phenomenon as described and lived by the participants. Successful completion of this step is evident if African American women who

have experienced the phenomenon of perceptions of physical activity can identify their personal experience in the resulting description.

The core of qualitative phenomenological research is its focus on lived experiences as they are described through participant stories. Hence, the phenomenological research tradition is appropriate for the present study as the aim is for increased understanding of African American single mothers' lived experiences with physical activity. This research tradition was conducive to providing objective, in-depth description of these women's perceptions of physical activity, from the perspectives of these women and free of researcher preconceptions.

Three primary research questions served as a research guide:

Research Question 1 (RQ1): What are African American single mothers' perceptions of their experiences of physical activity?

Research Question (RQ2): What do single African American mothers perceive as facilitators toward their own efforts at physical activity?

Research Question (RQ3): What do single African American mothers perceive as barriers toward their own efforts at physical activity?

### **Researcher Role and Personal Biases**

I served as the primary data collection instrument; my role of qualitative researcher comprised in-depth involvement in the study and generating an increasing understanding of the phenomenon of physical activity. I was responsible for attaining Institutional Review Board (IRB) approval before gathering data through conducting in-

person, in-depth, semistructured interviews with study participants using a researcher-developed interview guide comprised of open-ended questions. With participant consent, I recorded each interview, conducted transcribed the recorded interview, and then compared the transcript with the recording to confirm accuracy. Reflexivity, conveying honesty, openness, and authenticity, were important aspects of my role and allowed for organic flow of discussion during each interview. Additional responsibilities included securely and effectively organizing, storing, managing, and reporting the data.

Addressing any researcher bias was essential in assuring validity and reliability of study results. I had no known personal or professional relationship with study participants, particularly regarding supervisory or instructor relationships involving power over the participants. However, having resided (more than 20 years ago) and worked (more than 9 years ago) in the vicinity, there was a possibility that I knew of or might be related to prospective study participants, although this was not the case. My family members were ineligible for study participation in order to eliminate any potentially related ethical issues.

Managing any researcher bias involved neutrality during interviews (e.g., attire, tone, etc.), maintaining mindfulness (e.g., giving undivided attention) and a trusting environment, and using appropriate facial expressions/body language. In addition, I refrained from use of closed-ended and leading questions; provided clarification of interview questions asked when needed; asked general before specific questions (e.g., trajectory probing); sought clarification of responses; cross-checked or verified data

through member checking; and strived to remain objective. There were no other known ethical issues. Concluding discussion of the researcher role appropriately transitions into addressing methodology in the subsequent section.

## **Methodology**

### **Participant Selection Logic**

African American single mothers with female children, who reside in Clark County, Nevada, were the target population for participant selection. I employed criterion sampling, which is effective when working with a group among which each individual meets specific, predetermined criteria (Suri, 2011) and has lived experiences with the phenomenon under study (Palinkas et al., 2013). Essential in qualitative research, which involves interviews as the primary means for collecting data, is the concept of saturation. Data saturation is the point at which no new data emerges and there is no need to collect additional data (Marshall et al., 2013). Likelihood of reaching saturation occurs with 12–15 participants, according to Guest et al. (2006). Studies about weight-related issues involving African American women tend to have small samples (Osei-Assibey et al., 2010; Small, 2014). In a study focused on sample size in qualitative research, the researchers identified a range of 6–10 participants for a qualitative phenomenological study (Marshall et al, 2013). The same number of participants was sufficient for the present study. There was a specific focus and narrow scope for the present study, which Morse (2010) noted as sufficient justification for small sample size rationale. Considering

this information, the present study aimed for 6–10 participants and involved six participants.

Selected participants met four eligibility criteria: being self-identified as African American, single mother, between 18-35 years of age, and of LSES. Selected participants resided in a zip code of 89106, 89030, or within close proximity as the geographic area continues to divide into more zip codes while still encompassing the northeastern region of Clark County. The participants had at least one school-aged female child; were able to read, write, and speak in English; and agreed to recording of interviews. Considering the importance of recordings in assuring credibility, prospective participants who would not agree to recording of interviews were ineligible for study participation. Each study participant agreed with recording of the interviews. Other exclusion criteria included my family members, self-identified as other than African American; is not a single mother; under 18 years old; did not have at least one school-aged female child; and does not read, write, and speak English. Participant-reported information provided during prestudy surveying is the basis for determining that participants met the selection criteria.

Criterion sampling, which is a type of purposeful sampling that aligns with a qualitative approach (Palinkas et al., 2013), was the means for identifying study participants. Local groups such as the Nevada Partners, Southern Nevada Children First, National Association for the Advancement of Colored People, and community centers typically visited by the target group, helped to communicate announcement of the study. Southern Nevada Children First, my collaborating community organization, helped with



identifying participants who met the criteria and had interest in participating.

Accomplishing this included the posting of study information that identifies criteria for prospective study participants.

The research team, comprised of the researcher and representatives from the local groups mailed (and/or emailed) invitations to prospective participants, and selected participants from respondents as demonstrated in Carolan et al. (2012). Initial communications with prospective participants included information about the purpose, content, and nature of the study as well as assess each individual's willingness to participate and obtaining their agreement to proceed (Carolan et al., 2012). Importantly, participants received informed consent information prior to and/or the time of initial interviews, during which discussion addressed their role and readiness for participation (Carolan et al., 2012). Upon reaching agreement among the research team and participants, I recapped pertinent study information, answered questions, offered follow up contact information, and arranged an agreed upon neutral location and interview times (Carolan et al., 2012).

### **Instrumentation**

Instrumentation for the present study included a researcher-developed letter of intent (Appendix A), recruitment announcement (Appendix B), potential participant screening questionnaire (Appendix C), informed consent form (Appendix D), questionnaire to serve as a qualitative interview guide (Appendix E), and listing of free or very low-cost mental health resources (Appendix F). The interview guide included study-

specific, open-ended interview questions to ask each study participant in order to cover necessary topics during the conversation and ensure consistency in collecting the same general areas of information from each participant (Turner, 2010). I employed the option of trajectory probing as needed, for example, to help a participant remain focused on a topic (Turner, 2010). Each interview question related to the research questions, which aim to elicit the participants' perceptions of physical activity. Use of the researcher-developed instrumentation is a method supported in literature, according to Chenail (2011). Using an appropriate instrument provided for effective data collection, which is the topic of the following section.

### **Data Collection**

Data collection for the present study entailed in-depth, semistructured face-to-face interviews that provide information answers to the research questions and thereby responded to the research problem. Alternatively, telephone follow up was an option for data collection (Osei-Assibey et al., 2010) in situations where a participant is unable to participate in a follow up interview when needed for validating, clarifying, or correcting information resulting from an in-person interview. No follow up interviews were necessary, and none occurred. In a related study, focus groups and observations provided for ascertaining the health beliefs and habits of African Americans and gaining increased understanding (Eugeni et al., 2011). However, these methods were not appropriate for the present study due to study focus on individual perceptions of the phenomenon under

investigation. Thus, semistructured interviews were applicable and conducted for the present study.

Similar to the approach employed in McWhinney et al. (2011), I collected data from the study participants who met the selection criteria. Study participants' responded to open-ended questions about the perceptions, thus the lived experiences, of physical activity remains the focus of the interviews. I served as the moderator, asked interview questions, and record each interview session using a digital recorder. This procedure allowed for inductively analyzing and comparing responses.

Each study participant participated in an approximate 45- to 90-minute interview. I initiated each interview with the question, "How would you describe your experience with physical activity?" Next, I asked follow up questions, as guided by the interview guide, and probed as needed, for example if a response was unrelated to the topic. Interviews took place as prearranged with each study participant, at the West Las Vegas Library and/or the conference room of a local private organization. Adhering to an Institutional Review Board (IRB) Office Hours suggestion, I disclosed that I am not an affiliate of the library or the private organization. My contacts with the library and private organization assisted with my study recruitment by posting my recruitment flyer in at their locations and emailing the flyer to their contacts and prospective study participants.

Upon receiving my IRB approval number (11-25-15-0266374), I collaborated with four community organizations to provide an interview room and/or have a room available for back up if needed. I conducted private interviews with each study

participant and was prepared to arrange for someone to attend to the participant's child(ren) in another area of the interview site on an as-needed basis; prior to conducting the interviews, I confirmed the appropriateness of protocol. However, this was not necessary, as children did not accompany my study participants at the interview location.

No follow up meetings were necessary for accommodating study participants. After iteratively listening to interview recordings, I transcribed each recording then compared the written transcripts to the audiotapes. I subsequently summarized the interview transcripts, identified key findings, and prepared an easy-to-read, bulleted, two-page summary of the key findings. Cooper et al. (2006) employed similar methodology in a study conducted to analyze the learning experiences of qualitative research students. Correspondingly, my organizational contact suggested providing a small incentive for participating in the study. I provided each participant with a noncoercive \$10 Walmart gift card, after having first affirmed this suggestion during IRB Office Hours and identified a similar incentive provision in Dharod et al. (2011). The gift card served as an expression of appreciation for completing the study, thus helping with my research.

In addition, the procedure for exiting the study involved my conducting a debriefing with each participant. The briefing entailed a conversation with information similar to that on the informed consent form. I thanked the participant for participating in my study, offered to provide any clarification or additional information needed, addressed questions or concerns, and provided the listing of free or very low-cost mental health (or health and well-being) resources.

## **Data Analysis**

Data analysis involved transcription regarding content, constant comparison, and coding of participant responses, which afforded inductively identifying patterns and emergent themes as conducted in Eugeni et al. (2011). In addition, qualitative analysis software resourcefully provided for researcher analytic thought processing as well as information reporting. The present study included three research questions. All data collected connected with the research questions, as research question design afforded eliciting information that addressed the research problem of possible incomplete understanding about how African American single mothers perceive physical activity.

**Colaizzi's Descriptive Data Analysis Method.** Data analysis followed the descriptive phenomenology approach of Colaizzi, which is useful in identifying common characteristics among study participants (Kim, 2014) and entailed the following seven core steps (Edward & Welch, 2011; Wojnar & Swanson, 2007):

- Step 1: Iteratively read and transcribed, from the audiotaped interviews, all participant narratives to develop a sense of the whole.
- Step 2: Extracted significant statements that directly related to the phenomenon of perceptions of physical activity, with reference to these statements in Chapter 4, Study Results.
- Step 3: Formulated meaningful categories.
- Step 4: Organized formulated categories into thematic clusters of similar groups.

- Step 5: Coded the statements using Microsoft Word/Excel and NVivo version 11 qualitative data analysis software, integrating categories into an exhaustive description as conveyed by the participants (of an overarching theme). (Complementing this step was my effort to keep codes at a descriptive level during early analysis.)
- Step 6: Identified the essence of the experiential phenomenon as articulated by the participants (through rigorously analyzing the exhaustive description).
- Step 7: Rather than return to participants to have them review the transcripts and validate the essence of the phenomenon as described, I compared written transcripts with audiotapes then made any necessary changes to rectify discrepant cases. There were no discrepant cases. This step helped to ensure accurate conveyance of participant meaning of the essence of the phenomenon. Thorough and rigorous data collection and analysis helped to minimize potential issues of trustworthiness.

### **Issues of Trustworthiness**

There was potential for issues of trustworthiness with the present qualitative study. However, evidence of trustworthiness lies within the rigor of the phenomenological method derived from Husserl's phenomenological approach to data collection and analysis, with particular regard to utilizing Colaizzi's rigorous method of data analysis. The following aspects of trustworthiness are in accordance Lincoln and Guba's perspective that the importance of evaluation lies within evaluating the study's

worth as determined with consideration of credibility, transferability, dependability, and confirmability (Sinkovics & Alfoldi, 2012).

### **Credibility**

Ensuring credibility is a means for ensuring internal validity and truth of the study findings (Sinkovics & Alfoldi, 2012). Appropriate strategies for establishing credibility included triangulation, member checking (occurring as needed during each interview), saturation (referential), researcher reflexivity, and peer review.

### **Transferability**

Study findings from the present study are potentially transferrable among other researchers and in similar contextual settings though not generalizable, primarily due to focus of the present study on a small sample size of participants in a specific, limited geographic proximity. Transferability of the present study, therefore, helps to increase the study's external validity. These aspects of transferability coincide with Lincoln and Guba's viewpoints of trustworthiness as described in Sinkovics and Alfoldi (2012). An appropriate strategy for establishing transferability of the present study included providing rich, in-depth description of the essence of lived experiences with the phenomenon of perceptions of physical activity. Another strategy was to describe the research context and underlying assumptions central to the research.

### **Dependability**

The present study is dependable as I provided for consistent, repeatable research by thoroughly documenting my procedures, design, approach, and methodology, which

aligns with Sinkovics and Alfoldi (2012)'s description of Lincoln and Guba's take on trustworthiness. As explained above in the transferability section, the present study is possibly transferable among researchers and in similar contextual situations but is not generalizable to large populations. However, among appropriate strategies for establishing dependability were triangulation and maintaining audit trails.

### **Confirmability**

An aim of the present study was to establish confirmability through providing ability to confirm that results are neutral and indicated data from the participants' rather than my perspective. According to Sinkovics and Alfoldi (2012), Lincoln and Guba identify confirmability as a necessary aspect of research trustworthiness. Appropriate strategies for establishing confirmability included researcher bracketing and reflexivity/journaling, documenting my procedures for iteratively checking data (as noted above in the data analysis section), peer debriefing, and triangulation. Ensuring trustworthiness for the present study potentially contributes to increased ethical proceedings.

### **Ethical Procedures**

Research for the present study involved gathering potentially sensitive, health information from people, also referred to as human subjects, and therefore requires obtaining approval of the Walden University Institutional Review Board (IRB) prior to recruitment of participants and collecting data (Walden University, 2013). Hence, obtaining IRB approval preceded any contact or interaction with study participants. The



IRB approval process began with researcher completion and submission of the Research Ethics Review Application. The IRB process served to ensure researcher integrity, compliance with University and federal regulations, and protection of the study participants, researcher, and University. I demonstrated understanding of ethical procedures by applying for and receiving a Certificate of Confidentiality from the National Institutes of Health.

Participants received, agreed to, and signed a full-disclosure, informed consent form (Appendix D). By signing this form, the participants attested to understanding of confidentiality, their role and readiness for participation, upholding of respect, and the option to withdraw from the study at any time. I fostered with each study participant a relationship of unbiased and trusting dialogue and rapport to help minimize possible ethical issues. Possible ethical concerns related to recruitment materials surrounded inherent researcher bias due the concept of researcher as primary instrument, thereby collecting data. I bracketed any personal bias, assumptions, presuppositions, prior knowledge thoughts, and feelings. Bracketing allows for minimized influence on the study, grasping, and providing rich description for the essence of each lived experience from the perspective of the study participant (Lopez & Willis, 2004).

The informed consent process addressed the possibility of ethical concerns pertaining to participant refusal to participate and early withdrawal from the study. The process disclosed and allowed for participant withdrawal from the study at any time. A participant who felt sad or experienced remorse, stress, or distress during or after an

interview may contact any of the resources on the free or very low-cost Mental Health Resources Listing (Appendix F) or a health provider of their choice. Examples of such participants might be mothers who are absent from their children, were recently incarcerated, or become emotional when recalling experiences.

Treatment of data entailed storing and archiving data in a secured system for a period of at least 5 years in accordance with University requirements, with confidentiality maintained through masking and/or using alias information. My dissemination plan involved sharing a two-page results summary with my community partner and study participants instead of sharing the full dissertation, as suggested by the IRB during my IRB application process. Access to research findings are available to Walden University and other educational institutions for individuals seeking information possibly helpful for writing dissertations and/or informing design and development of community health improvement initiatives regarding ethnic populations. Further dissemination potentially involves research article submission to peer-reviewed health-related journals. There are no other known ethical issues.

### **Summary**

This chapter included a thorough description on the methodology for the present study, beginning with introductory information about the phenomenon of African American single mothers' perceptions of physical activity, with particular regard to mothers of LSES and with female children. Following was explanation of the research design and rationale. Subsequently addressed were the researcher role and study

methodology. The chapter concluded with explanation regarding issues of trustworthiness.

Chapter 4 comprises discussion of the study results. In this chapter, I address the research setting and participant demographics. Additionally included is discussion of data collection and data analysis. I conclude Chapter 4 with presentation of the study results.

## Chapter 4: Results

### **Introduction**

The purpose of this phenomenological qualitative study was to increase understanding of African American single mothers' perceptions of physical activity. The focuses of this study were African American single mothers who were residents of Clark County in Nevada, an area geographically located in the northeastern region of the City of Las Vegas. These women are of LSES and have at least one school-aged female child. The following research questions provided for gaining an understanding of the research problem, contributed to increased study focus, and helped to convey the study aim.

### **Research Questions**

Research Question 1 (RQ1): What are African American single mothers' perceptions of their experiences of physical activity?

Research Question 2 (RQ2): What do single African American mothers perceive as facilitators toward their own efforts at physical activity?

Research Question 3 (RQ3): What do single African American mothers perceive as barriers toward their own efforts at physical activity?

This chapter includes an overview of study results pertaining to African American single mothers' perceptions of physical activity. Also, included in this chapter is a description of the research setting, participant demographics, research procedures (including data collection and data analysis), and evidence of trustworthiness. I conclude

this chapter with statement of transition to Chapter 5 in which I present my study conclusions.

### **Research Setting**

I conducted a phenomenological qualitative study, with face-to-face interviews in a private room as the means for data collection. Interviews occurred in December 2015, January 2016, and February 2016. The study participants were African American single mothers of LSES and with at least one school-aged female child. Although study participants agreed to face-to-face, recorded interviews, I perceived that a few of the participants seemed uncomfortable about recording, as they may not have understood the difference between audio recording and video recording. To promote trustworthiness, I also explained that audio recording captures only our voices. The study participants all verbally indicated that they wanted to continue, which contributed to productive discussion during the interviews.

My scheduling protocol involved documenting each jointly arranged interview on my Google Calendar, recording the interview in my paper calendar as a backup means, and maintaining a log of interviews. The log included the coded participant name (in the format of P#-XX, indicating participant number and initials), date, and time of the interview. To the best of my knowledge, there were no personal or organizational conditions at the time of the study that might have influenced participants and influenced the interpretation of study results. One interview required rescheduling due to weather conditions.

### **Participant Demographics**

My study included six African American single mothers who resided in a northeastern region of Clark County, Nevada. At the time of this study, this locality's inhabitants in general practiced insufficient levels of physical activity and had an increasing prevalence of preventable health issues such as obesity (CDC, n.d.). Potential participants learned about the opportunity to participate primarily from word of mouth, fliers posted in regularly frequented areas (such as community centers and libraries), and communications from my collaborative community organization, as documented on my Walden University IRB-approved Letter of Cooperation (Appendix G). I found it difficult to reach this population, and confirmed with a community leader servicing the population that these women tend to be self-protective for various reasons, such as lack of trust, desire to keep their personal information private, and possible sensitivity of weight-related subjects. I proactively addressed this potential difficulty by making efforts to establish initial contact with prospective participants through use of the announcement fliers with my contact information, then by conducting telephone prescreening interviews during which I was able to establish rapport, trust, and increased comfort levels.

Ten women initially expressed interest and participated in a brief initial telephone screening call. These women provided self-reported information to establish their eligibility for study participation. Four of the 10 women were ineligible: two because the women were married and the other two because they had only sons. I documented information provided by each woman on a screening questionnaire for each woman, then

destroyed the information for the four women who were ineligible. I will maintain the documents in a secured filing system in my private home office in accordance with University data storage requirements for the six eligible women.

These six women followed through with an in-depth, semistructured, face-to-face interview. All of these women were African American single mothers, within an age range of 28–34 years old (100%) and with at least one school-aged daughter. Four of these participants had one school-aged daughter (67%), while the other two participants each had two school-aged daughters (33%). Each woman had experience with physical activity; fluently spoke, read, and wrote in English; and was of low socioeconomic status (LSES), with less than \$45K/household for family of up to four members. Two of the participants self-reported an income of \$0-15K (33.33%), two self-reported \$15-25K (33.33%), and the other two self-reported \$0-\$45K (33.33%). Each of the women considered herself to be of low-income status. In addition, the participants resided in the same geographic proximity. Table 1 reflects the participants' demographic information.

Table 1

*Participant Demographic Profile*

Participant #	Participant Age (years)	# of School- Aged Female Children	Income (\$K)
1	32	1	\$0-\$15K
2	32	1	\$0-\$45K
3	33	2	\$15-\$25K
4	28	1	\$0-\$45K
5	34	1	\$15-\$25K
6	34	2	\$0-\$15K

**Research Procedures**

Data collection for this study consisted of an audio-recorded, face-to-face, private interview with each of the six study participants. Comprising data analysis were transcribing of the audio-recorded interviews, constant comparisons, and coding responses. This process resulted in identifying inductively emergent themes and patterns.

**Data Collection**

Data collection entailed private, in-depth, semistructured, face-to-face interviews, which Eugeni et al. (2011) indicated is appropriate for eliciting information in response to the research questions and thereby addressing the research problem. Participants communicated with me in response to my collaborative community partner's posting of study announcement fliers and email communications as well as word of mouth communications. My informed consent protocol, expressed during prescreening calls and actual interviews, entailed informing participants that the study was completely voluntary



and low risk of harm in addition to assuring maintenance of their confidentiality. This approach contributed to trustworthiness of the study.

I conducted private, audio-recorded interview with each of my six study participants, all of whom live in a close proximity in Clark County in Nevada. Each interview lasted approximately 40–50 minutes. The data collected elicited in response to the research questions addressed the research problem of possible incomplete understanding about how African American single mothers perceive physical activity. I used my researcher-developed qualitative interview guide (Appendix E), as validated by my dissertation committee chairperson. My first participant interviewed validated appropriateness of the interview questionnaire, which served to guide the interview discussion.

The study participants and I jointly scheduled the interviews, with each participant agreeing that they considered the site nonthreatening, conveniently located, and participant-accessible. Three interviews occurred in a private room at Southern Nevada Children First, from which I obtained a letter of cooperation; this organization also assisted with study recruitment efforts. The other three interviews occurred in a private room at Doolittle Community Center; I did not obtain a letter of cooperation because this organization did not assist with my recruiting efforts. Interview dates were sporadic as the dates depended on each participant's availability. The interview duration spanned December 2015 to February 2016. I provided full disclosure of the study,

reminding each participant of informed consent prior to beginning the interview questions.

I used a digital audio recorder to record each interview then saved each recording on my password-protected personal computer. I stored the recording device in a secured, locked cabinet in my private home office for later access if needed. An audio recorder on my password-protected personal cellular phone served as my backup audio recording device. I saved each audio recording, having protected each participant's name by using a masking code that included the participant number; participant code of first and last name initials; and the interview day, date, and time (e.g., P1-AF Wed 12-16-2015 12-30pm). Table 2 includes a listing of these identifiers. There were no variations in data collection from the plan presented in Chapter 3. The only unanticipated circumstance was that participant 5 rescheduled her interview to the day after the originally scheduled date as the result of a change in her transportation plans, coupled with in climate weather that precluded her from walking to the nearby interview location of Doolittle Community Center.

Table 2

*Participant Interview Audio Recording Identifiers*

Participant #	Participant Code (first and last name initials)	Interview Date (day, date, time [PST])
1	P1-AF	Wed 12-16-2015 12:30pm
2	P2-CB	Fri 12-18-2015 9:30am
3	P3-TW	Thur 01-07-2016 11:30am
4	P4-CG	Tues 01-19-2016 3:45pm
5	P5-KH	Wed 01-20-2016 9am
6	P6-SD	Mon 01-25-2016 9am

**Data Analysis**

My data analysis entailed Colaizzi's seven-step strategy for analyzing data. These steps included: transcribing interview data, extracting significant statements regarding the phenomenon of perceptions of physical activity, formulating categories, organizing categories into thematic groups, coding statements, interpreting and exhaustively describing the essence of the experiential phenomenon, and validating accurate conveyance of the participant's meaning in the essence of the phenomenon through comparing the transcribed information with the interview recordings. Hence, this approach involved an iterative process of transcribing the recorded data, constant comparison, and coding of participant responses to interview questions in effort to develop a sense of the whole, a process exemplified by Wojnar and Swanson (2007). Likewise, the same approach afforded an effective means for analyzing my study data.

I initially listened to each recording. Following this step was my transcribing of each interview recording into a MS Word document, including researcher notations. Rather than provide a listing of chronologically ordered statements regarding the

phenomenon of perceptions of physical activity, I liberally provided the statements in Chapter 4 to help effectively substantiate my study results. This approach allowed for greater concision of my dissertation documentation. After transcribing, I listened to each recording again to confirm the statements. I made any necessary changes or corrections in the transcribed data then reread the transcriptions again while seeking and allowing for inductive emergence of themes and patterns. This approach leads to identifying common characteristics among study participants (Kim, 2014).

Upon completing the transcriptions, I imported the documents into NVivo version 11 qualitative data analysis software, created meaningful categories, and organized categories into thematic groups. I conducted my coding process, using colors to highlight various ideas and concepts. This process allowed for inductively seeking emergent themes and patterns (Eugeni et al., 2011). Iteratively listening to the interview recordings during the coding process helped to ensure accurate assessment of contextual responses. To validate accuracy of my transcribed data as communicated by the study participant, I read through and compared each transcription with the respective recording. Comparing themes and patterns in the MS Word transcriptions validated the themes and patterns identified via the transcribed information in NVivo version 11. Table 3 denotes inductively emergent themes and subthemes as presented for each of the study research questions and collectively representing eight overall themes (with some overlap of themes per research question): healthy lifestyle, social support, resources/education,

body/self-image, stress management, fear and embarrassment, motivation/inspiration, and injury/illness.

Table 3

*Emergent Themes for Research Questions*

Research Question 1 (*IQs 1–9: perceptions of physical activity)	Research Question 2 (*IQ 4: facilitators of physical activity)	Research Question 3 (*IQ 5: barriers of physical activity)
Healthy Lifestyle/ Disease Prevention Nutrition Social Support Family/Culture Body/Self Image Stress Management Mind/Emotions/Thinking Time for Self Motivation/Inspiration Familial Influence Role Model Fear/Embarrassment	Healthy Lifestyle Education Instruction/Guidance Motivation/Inspiration Familial Influence Family Time Role Model Body/Self-Image	Lack of Social Support Family/Culture Lack of Access to Resources Lack of Education Lack of Instruction/Guidance Lack of Affordable Access to Opportunities for Physical Activity Lack of Motivation Injury/Illness

Combining multiple codes of similar data into themes and integrating categories involved synthesizing the themes and related categories. This was a means for deriving an exhaustive description of an overarching theme as described by my participants. The process was conducive to identifying the essence of experience with the phenomenon of perceptions of physical activity as articulated by my study participants and allowed for rich, in-depth description for presenting the information.

NVivo version 11 allowed importing of MS Word/Excel documentation, sorting and analyzing data, my analytic thought processing, and reporting of information. All study-related data will be securely stored and maintained for five years then will be

appropriately disposed of in accordance with Walden University requirements. This process will entail removal of electronic data files and shredding of related paperwork.

### **Evidence of Trustworthiness**

Qualitative research involves the research immersing in the research endeavor with the aim of thoroughly and accurately comprehending each participant's perspective of the phenomenon under study. Accomplishing this requires that the data is trustworthy. Hence, evidence of trustworthiness for the present study occurred through the rigor of the phenomenological method derived from Husserl's phenomenological approach to data collection and analysis. Utilizing Colaizzi's rigorous method of data analysis afforded evidence of trustworthiness. Establishing trustworthiness involves consideration of the aspects of credibility, transferability, dependability, and confirmability (Sinkovics & Alfoldi, 2012).

### **Credibility**

Trustworthiness is an important aspect of evaluating the worth of a study, according to Sinkovics and Alfoldi (2012). Various strategies contributed to establishing credibility for my study. I completed the National Institute of Health's certification for protecting human research participants. I followed my Walden University IRB-approved data collection process, allowing 45-90 minutes for each interview. This helped to ensure ample time allotment for eliciting and documenting rich, thick descriptions from my study participants. My fostering of a relationship of trust and rapport helped to create an

interview atmosphere conducive to each participant genuinely sharing her perceptions, beliefs, attitude, and desires regarding her experience with physical activity.

I employed a sampling range of 6-10 study participants in accordance with Marshall et al. (2013) assertion that for qualitative research, this range was conducive to reaching saturation, thus the point at which no new information occurred. I interviewed six study participants, although saturation occurred with the fifth participant. I employed triangulation by making reflexive notes during each interview then later reflected upon and verified the notes while listening to and transcribing the respective recording. Asking probing questions contributed to each participant's sharing thorough information, allowing for saturation (referential). Confirming of information with the participant throughout each interview, then during the analysis process comparing transcribed information with the respective recording, served to validate information. Ensuring credibility contributed to internal validity and truth of the study findings.

### **Transferability**

I established transferability in that the study is potentially transferrable among future researchers and in similar contextual settings. Other possible settings could be in other regions of Clark County, Nevada. Likewise, my two-page study summary is possibly transferable among community organizations in the Clark County area that provide health-related services for African American single mothers. However, the study is not generalizable, primarily due to focus of the present study on a small sample size of participants in a specific, limited geographic proximity. Transferability of the present



study, therefore, helped to increase the study's external validity. In accordance with Marshal et al. (2013), establishing transferability included providing rich, in-depth description of the essence of lived experiences with the phenomenon under study, thus perceptions of physical activity for this study. Another strategy was to describe, in detail, the research context and underlying assumptions central to the research.

### **Dependability**

I accomplished dependability for this study by thoroughly documenting my procedures, design, approach, and methodology. Utilizing Colaizzi's technique and NVivo version 11 qualitative data analysis software, coding of interview information and identifying themes allowed for validating my participant responses during the analysis phase. Among appropriate strategies for establishing dependability were triangulating the data and maintaining audit trails (Edward & Welch, 2011; Wojnar & Swanson, 2007). All of these strategies represent replicable approaches.

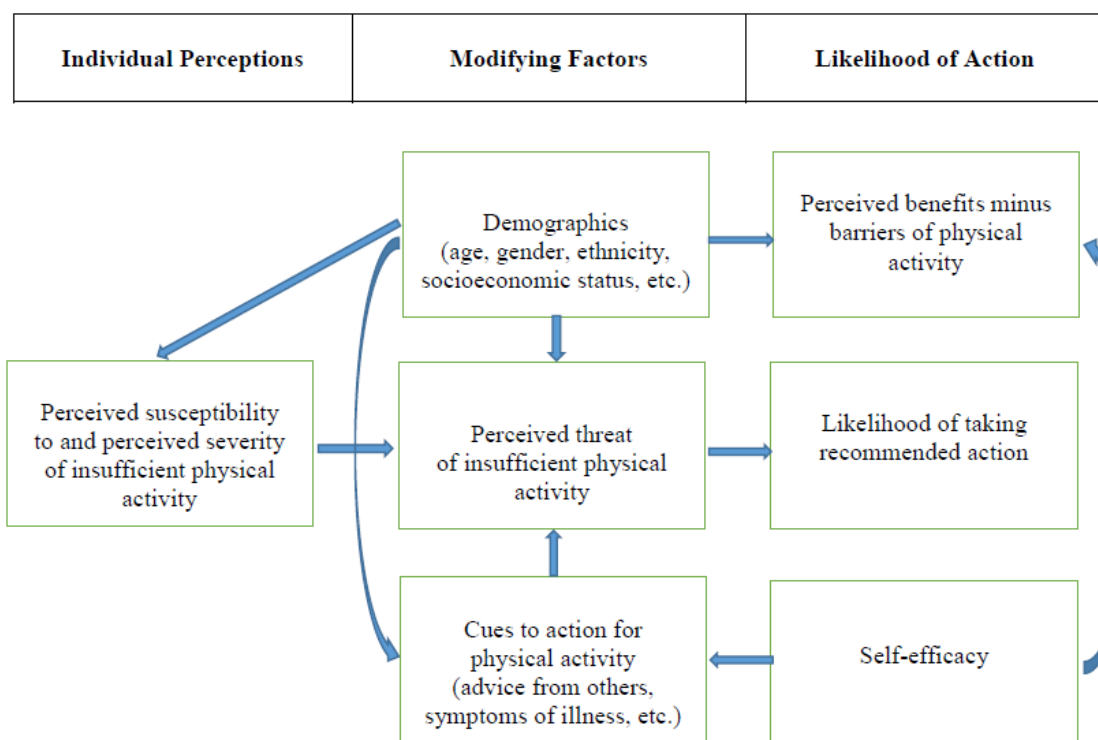
### **Confirmability**

I achieved confirmability and reliability through ensuring neutrality of the study results as represented in documented participant statements and by indicating in interview transcripts data from each participant's perspective rather than from my perspective. Confirming data integrity entailed my bracketing and reflexivity/journaling, documenting procedures, and iteratively checking and comparing data (as noted in the previously discussed data analysis section), peer debriefing, and triangulation. Employing Colaizzi's data analysis strategy of transcribe, extract, formulate, organize, code, exhaustively

describe, and validate information ensured trustworthiness for the present study as demonstrated in the study results. In addition, my dissertation committee served in an advisory role regarding any potential confirmability-related issues.

### **Study Results**

I created Figure 1 to illustrate the health belief model, which shaped study results, providing theoretical foundation and serving as a contextual lens for exploring African American single mothers' perceptions of physical activity. The six constructs of perceived susceptibility, perceived severity, perceived benefits, perceived barriers, self-efficacy, and cues to action provided for identifying themes and patterns helpful in responding to the research questions, addressing the research problem, and increasing understanding of how African American single mothers perceive physical activity. Such understanding could inform development of culturally appropriate interventions and programming for these women, possibly helping to decrease the onset of preventable chronic disease.



*Figure 1.* A flowchart showing the steps in the health belief model.

The following section includes descriptions of the top study results, showing the inductively emergent themes and subthemes as presented for each study research question and indicating the importance of social determinants of health as discussed in Chapter 2. The themes and subthemes collectively represent eight overall themes (with some overlap of themes per research question): healthy lifestyle; social support; resources and education; body/self-image; stress management; fear and embarrassment; motivation/inspiration; and injury or illness. Because study participants strongly indicated desire to learn and engage in more physical activity in addition to living healthier lifestyles, lack of health literacy and empowerment to do so seems to be an issue.

### **Research Question 1: Perceptions of Physical Activity**

The first research question (RQ1) was, “What are African American single mothers’ perceptions of their experiences of physical activity?” Investigating this question helped with addressing the problem wherein the extensive research base pertaining to physical activity and resulting consequences of insufficient physical activity includes limited information specific to these women. Although it is essential to understand African American women’s viewpoints and perceptions of weight-related issue, including physical activity (James et al., 2012), there is even less research about how these women perceive physical activity. This is the case even though these women’s perceptions and views differ from those of the medical profession (James et al., 2012). These differing views pertained to body size, food, and the meaning of physical activity. In conducting my research, I found that culture is a crucial element in African American women’s viewpoints and perceptions (Lynch & Kane, 2014).

The study participants expressed their perception of physical activity as important and necessary for attaining or sustaining overall well-being. Major themes and subthemes included:

- healthy lifestyle/disease prevention (nutrition),
- education (instruction/guidance),
- social support (family and culture),
- body/self-image,
- stress management (mind, emotions, thinking, and time for self),

- motivation/inspiration (familial influence, family time, and role model), and
- fear/embarrassment.

### **Healthy Lifestyle/Disease Prevention**

Healthy living was an important aspect of life for study participants, although they wanted additional knowledge in order to do more to be healthy. Each of the study participants expressed desire for living a healthy lifestyle and minimizing chances for onset of health issues and preventable chronic health issues such as obesity and diabetes. All of the study participants had thoughts about what it means to live a healthy lifestyle yet indicated their need for becoming more knowledgeable to increase chances of attaining overall well-being, with particular regard to being physically active, eating healthy foods, managing stress, having a healthy sense of body/self-image, teaching their children and others to live healthy lifestyles. Participants articulated their perspectives about healthy lifestyles, thus not living sedentary lifestyles.

When talking about healthy lifestyles and the consequences of sedentary lifestyles, a study participant shared about the importance of healthy living versus living with illness, stating,

I feel like it's important, especially now a days. There's so much going on in the world, things like obesity, especially in children. It really hurts my heart to see a lot of children, especially young children. I have a niece that's obese. That could lead to diabetes and things like that. That's what I want to avoid for myself and for my children. I tell my brothers that. Diabetes runs in the family bloodline. Not even

just that, African Americans, period. You need to watch it, your heart. I just, I care about my insides.

Another participant shared that physical activity helps her to remain motivated and interested in learning. She said,

Physical activity for me, first off is to stay motivated, not just a sport, but, I would say the people around me, I like to engage. I like to learn things, so I'm constantly moving or searching to do more than I'm already doing. So, physical activity for me could be a number of things, not just like a sport. Physical activity could be work or thinking, because I'm always trying to be motivated. Everything is physical for me because it never stops, so it's always going on.

**Nutrition.** Study participants understood the importance of and want to live healthy lifestyles. Living a healthy lifestyle requires healthy nutrition and engagement in sufficient levels of physical activity (Dharod et al., 2011). Healthy nutrition is important as it provides bodily energy needed for engaging physical activity. Nutrition and physical activity interrelate to produce increased health benefits while helping to (Ickes and Sharma 2011). In spite of such benefits, healthy eating and engaging in physical activity presents challenges for African American single mothers of LSES. This is partly due to the influence of culture, social relationships, and familial roles of these women (Barr-Anderson et al., 2013). Another contributor the challenge of healthy eating is maintaining cultural customs about food and eating, especially succumbing to pressure by family and friends to eat more (Baruth et al., 2014). This was demonstrated in one study participant's

statement about her daughter's nutrition habits being influenced by the daughter's

Godmother's food-related habits:

She would eat a pizza, a whole slice of pizza. I don't even think she was one yet.

Then they would get, instead of kid's meal, they would get her the Big Mac meal.

I would look at that and think "Y'all can't keep doing that." My daughter pushed away from that. It was only fruits and vegetables. That's what she does to this day.

She's not really a meat eater. She doesn't really eat junk food like that.

In addition to all of the study participants indicating their understanding of the role and importance of healthy eating in living a healthy lifestyle, they wanted more information. They expressed wanting to learn more about what to eat, how to affordably eat healthy foods, and healthy food preparation while indicating concern about not being able to afford healthy foods as indicated in one participant's statements:

I am changing my eating habits. There is so much information on the eating habits, I think. My doctor, when I had a follow-up, recommended weight watchers because they do portion control and more balance. I'm looking into starting that within the next few weeks. All of those things, I'm hoping, are going to help.

It's hard because healthy food is more expensive. It's not like where it's impossible because my family is so small. If I make dinner, it's just for me and the girls, so it's like two people. But it does... the healthier stuff, the fresher stuff, it starts to cost more and more and more. Sometimes it's easier to just go and get something that's more calorie dense and make it into a meal versus something that is fresh and

healthier for them to eat. Then there is so much information. One day, it's eat whole grains. The next day it's not. It's just I don't even know which... I try to just follow as much as I can. It just depends on who you ask. Some people say meat is good. Some say it is not. Some people say milk is good and some say it is not. So it is really confusing, too, just from a diet standpoint what we should be eating and what we shouldn't be eating.

### **Education**

Aligning with my research findings, education was a factor commonly expressed as a necessary predicate for engagement in sufficient levels of physical activity. Study participants emphasized the importance of knowing and understanding the importance and role of physical activity in living a healthy lifestyle. They consistently indicated their desire to learn about physical activity.

One woman expressed multiple times that she wishes she knew when she was younger what she knows now about the importance of physical activity and how to be more physically active.

I think it's an area where there is very little education that I am aware of. I'm starting to learn about going to the gym. I'm starting to learn how good it is for me, and I'm starting to learn that it's nerve-wrecking just going to the gym and not having a gym backgrounds and not knowing what to expect.



I just wish that I would have known more than what I'm learning now. I wish I would have known years ago the importance of being active and what that looks like and what that means, like in my 20's.

**Instruction/Guidance.** Study participants conveyed that they want to exercise, teach their children, be encouraged, inspire others, and to be role models. In addition, the women expressed their desire to learn how to exercise, what exercises or physical activity to do, and what foods to eat and avoid. Importantly, the women want to know where to go for information, resources, and support.

In general pushing as much as it should be pushed. I know everybody probably does physical activity, but I just feel like it needs to be pushed more because I sit there. When I was younger, I really didn't move around that much, so I encourage my kids to move around a little bit more than I did. Maybe if we had people, somebody to help, somebody that can come show us how to do it or even give us some instructions on how to get there or something like that.

**Social support.** Being a single mother presents unique challenges when striving to live healthy lifestyles as these women are often sole providers for and caretakers of their children (and other family members). As such, social support is among the consistently expressed factors identified as necessary for African American women to engage in physical activity, maintain healthy eating habits, and essentially live healthy lifestyles (Bracy et al., 2014; Eugeni et al., 2011; Mama et al., 2015). Living a healthy lifestyle requires prioritizing, thus making time for things such as physical activity.

However, time is often a scarce commodity in view of African American single mothers' domestic and family-related responsibilities. These women therefore need social support, whether family or otherwise, in order to make their and their children's well-being a priority.

When I leave the house, I really can't more so be by myself. I also have to watch over my household. My mother stays with me. She is also sickly. I have to watch over her as well. I have to watch over the house. Then I still have me. I'm looking at my daughter. I try to do as much as I can with her because I'm helping out over here as well as myself. I'm kind of the rock. The rock is kind of broken a little as well, trying to keep all the pieces together. Then it's also your mindset and your daughter looking at you and all this other stuff. Then you're still trying to be motivating for her and then your mother, you need your mother's support but she can't because she's also sick. So you're watching over and making sure... So it's not like it's an uncomfortable situation, but I try to make the best of the situation as much as I can. I don't want to get into that mode of I can't do this or I can't do that and I won't be able to do this. That kind of a barrier.

**Family/Culture.** Family and culture are important factors for consideration in matters concerning African American women as these women tend to be foundational in the family. Family is an important source of support for these women in making healthy lifestyle changes, thus helping to minimize illness. African American families sometimes extend beyond biological relationships to include others such as a friend or other person

referenced, for example, as Godmother of the children. African American single mothers might call upon support from these individuals for support when needed. The Godmother could be influential encouraging healthy behaviors that help to minimize onset of preventable chronic disease such as obesity. I discovered from results of study interview results that the women often give higher priority to health and well-being of their children and others revealed than their own, which contributes to delayed or impeded engagement in physical activity.

Hence, family and support significantly affect these women's experiences, decisions, and relations with their children. While talking about emotional changes resulting from her experience with physical experience, one woman shared that she sometimes feels lost. She elaborated to say that at 14 years old, she lost her mom. As a result, she felt as though she lost touch with her sense of self, thus who she is, as noted in her statement here.

I over think some things. To me, I'm just trying to get to a place where I can just be myself again. Sometimes, I feel like I'm just fitting in but I'm still motivated to do what's best for me and my family.

Similarly, the following statement expresses what a study participant conveyed regarding physical activity and healthy eating not being essential in living a healthy lifestyle when she was a child.

Part of my upbringing is that we're all going to pass away of something. My mom always said everything causes cancer. It really just wasn't one of those things where

diet and exercise were a huge deal. It was kind of like you got the genes you got. Genetics are genetics. It is what it is. It wasn't really pushed a lot. And that's kind of the mentality that I have.

### **Body/Self-Image**

Body and self-image (e.g., view of oneself) are culturally influenced factors for African American women. These women's views of their bodies contribute to better health outcomes, according to Rentfrow et al. (2013). Supporting this assertion, study participants articulated aspiration for liking the physical appearance of their bodies and being overall healthy. Another important consideration that surfaced during interviews with study participants was their concern for the daughter's physical health. African American female children perceive their body image and size differently from females of other ethnicities, as do African American women. Maintaining their culturally ascribed views regarding body and weight could affect whether and the extent to which African American single mothers and their daughters engage in physical activity.

One study participant talked about wanting to maintain her body shape rather than become heavy weight, which is common in her family.

It's a great outcome that came for me, physically. I have a good shape. I like my shape. I'm not heavy set. My family, they're pretty heavy weight. That's a motivation of mine too because I don't want to let myself go and just gain that weight and things like that.

A different participant articulated her intrinsic desire and self-worth as affecting her engagement in physical activity.

I do it for myself. I do it for me, period. I do it for my happiness, my self-worth and how I feel. Since I am limited to certain things, I really want to be out there to do things and push my body to do because I want to still be able to do these things.

In another statement, the study participant credited her aspiration for constantly doing something as a reason for wanting to remain physically active.

It makes me feel that I'm actually doing something instead of just sitting at the house. I have an enjoyment of doing physical activity because it may not actually be available to me later, so I try to do as much as I can, especially with my body itself.

I like to make sure that I am still motivated with doing things with my body because I don't like to just sit around the house or just be in there because what if it's just taken one day? Then you're sitting there like thinking, I wish I could have done this. I try to experience as much as I can.

An expression shared by another study participant pertained to her motivation for being physically active helping to shape her self-worth and self-image. The same participant also shared that if she feels her body cannot do something, it is sometimes good to show her body that it is not always in charge of who she is. She considers it a mind over matter situation.

You are going to do this and whether it's good or bad, at least you tried to do it. So it's like you don't lose yourself. You're trying to keep yourself and who you are the

same time of limitations. You just push a little bit. You just try to do something and you try to go a little bit further every day. Okay, you walked a mile today. Maybe you'll walk a little bit more tomorrow. You just keep pushing until you reach the two-mile mark and then maybe you'll have an accomplishment after that.

**Stress management.** Minimizing and managing stress are crucial components of living a healthy lifestyle. Other important aspects include understanding the source of stress, such as lack of self-care, and ways to combat stress. My study participants recognized the harmful impacts of stress and the importance of alleviating as much stress as possible in order to exercise better self-care. It was apparent in the study results that some physical activity, healthy eating, and time alone to think and relax helped to minimize and deal with stress.

One study participant indicated that her physical activity as seems to help reduce stress.

It's almost like it's helping me with stress. I'm not really sure how to word that. I don't know too much about physical activity to say it's like, "oh it's the whatever response or it's this.

A related participant statement reflected improvement in health and life satisfaction.

I have noticed that my life has been better and I feel less stressed even though my life is exactly the same. Not much has changed but my responses to it. I guess I don't know if it's just that the gym is draining it out of me. So, I don't have the energy to be stressed out about things. But the sleep is good because I sleep a lot. I

go to bed early then I sleep. I go to bed around 10pm and I wake up around 7am, so I get a good amount of sleep. Now, I am starting to go to bed around the same time but I'm starting to wake up earlier. I don't feel tired or exhausted throughout the day.

**Mind/Emotions/Thinking.** Discussion about mind, emotions, and thinking was common among the study participants. Frequently mentioned was that their minds are constantly going, meaning they tend to think a lot or have a lot on their mind. The women indicated that keeping moving is a good way to focus or relax their minds. Walking, working, or playing with their children, kept them moving and minimized thinking or emotions that could have become stressful. One woman shared that she does not think about anything when she is at work. She said her mind remains focused, and she is at peace rather than worried. She additionally shared that being physically active makes her happy because she is moving around, which she feels good about. The following are related statements expressed by participants.

That was the most important thing for me. I kind of figured that out walking around the track one morning. I'm like, maybe I should do this every day, every morning. I had started doing that and it was just better and better and I was just getting results and went from there.

It's all me, comes down to what I want to do and how I want to do it and am I going to do it. Because like I said, it's my mind going one hundred... I just have a lot going on, which is nothing. I feel like it's so much, and it's really not as bad as it

is. It's not. Me, I feel like I can do it, but it's always a part of me that thinks "maybe tomorrow." I don't know why I am like that. But, I have so much drive to do it. I'll say tomorrow, and you know what, I'll probably sit there for a little bit, then I'll get up and do it. Or, I'll sit there for a little bit and just say okay well tomorrow then. It's like a mind thing. It's all in my mind.

There was a while when we didn't have a car, so from where we live, walking to the bus stop or walking to the store, it could take anywhere from 10 to 20 minutes. I got used to walking. Actually, walking doesn't even bother me. It gives me time to clear my mind, to think about stuff, such as a grocery list, what I need to put on it, things I can do when I go back home or things I can do when I'm working to make my job better. It clears my mind to do things like that. Even now, I have a car, I'll still walk just to get the exercise.

**Time for self.** Being a single mother involved many demands on time and energy. Taking time out for themselves was often difficult, which is why it is important for these women to have social support. Study participants expressed that, in addition to enjoying time with family and others, they need and want time for themselves. They shared that during their time alone, they are able to think, relax, and rejuvenate. The more focused attention they have on themselves, the better positioned they are to care for and teach their children, as indicated in the following statements.

My kids, they distract me sometimes. They are good kids. I think I am all hard on them so they don't end up not graduating, not having a job, on the street. They are



my big distraction too because I'll stop what I'm doing. I'm supposed to be going here and doing this and they'll get in the way or something. Not actually get in the way, but it will stop all my whole tracks of what I'm doing, and I won't do it. I know we're not talking about sons, but he is 13 years old, and he is a handful. I'm a single mom, so it's kind of hard raising a boy. I don't know. He puts a lot of pressure on me.

When I'm walking, I have that really, really calm, especially when I get back home. It feels so good to get up and actually walk her to school and knowing that she's okay. When I get home, I'm so relaxed. It's like, "Okay, cool. Everybody's at school. Everything is done. I'm good."

### **Motivation/Inspiration**

Study results revealed motivation and inspiration as precursors for incorporating sufficient levels of physical activity into daily or regular routines. My research results indicated that spirituality is a common source of encouragement for physical activity for African American women, according to Eugeni et al. (2013). I learned from the interviews conducted that spirituality encouraged my study participants.

Correspondingly, my research revealed that these women's culturally influenced meanings of physical activity differ from those of the medical profession (Eugeni et al., 2011). Supporting this finding is one study participant's statement about her motivation to learn as a means for being creatively physically active in addition to remaining physically active.

I like to learn things, so I'm constantly moving, or searching to do more than I'm already doing. So, physical activity for me could be a number of things, not just like a sport. Physical activity could be, for me, work, thinking, because I'm always trying to be motivated.

I try to do everything the right way as far as what I have learned and the right way to go about it, so bettering myself.

Another participant described her perspective of being physically active as helping her to feel alive, vivacious.

To me being physically active is being alive, like you're doing, you are being out in the world. You're experiencing stuff. You're looking at things. You're not sitting in the house watching TV. Why don't you do it for yourself? Instead of watching it, go be it. Go do these things that you see on TV.

**Familial influence.** Study participants faced the issue and consequences of insufficient physical activity. Compelling the issue was the affect these women's familial influence on their children's health behaviors, potentially indicating generational impact. This revelation corroborated research results asserting familial influence of single mothers as possibly contributing to onset of preventable chronic disease, noting the mothers' dietary and physical activity-related decisions in the family as one possible reason (Anderson et al., 2013). Study participants recognized engagement in regular physical activity as core in living a healthy lifestyle, whether or not they are sufficiently physically active.

I've got drive. That's the reason I think my kids are the way they are, because I've got that drive to get them where they are. I'm not giving up no anytime soon. I'm on the go.

I know I could have been physically active but it's just that I didn't. It wasn't like it was mandatory to be physically active, so I don't want my kids to know that... I want my kids to know they could. It's not mandatory, but I want them to feel like it is. Like, you have to, you have to go and walk around or get that air, get your legs, your body moving around and stuff like that. That's the only thing. Maybe I could be physical.

Similarly, when speaking of things they want their children to learn, participants talked about the importance of going out and trying things, trying to be physically active.

I think about that all the time. Sometimes, I get frustrated. At the same time, their kids. They're still learning. I have to explain to them that I'm not going to always be here. You guys have to pick up and learn the things that you need to learn to make your life better.

Rather than being in the house, go try it and see if you can do it yourself. Go out there and run and play and experience things. I've always been the type who like to be doing something. I want her to be that person instead of sitting in the house. I don't want her to not be able to.

Positive things are better than sitting in the house learning something she probably shouldn't and I don't want her to be afraid to go out and do things.

I want my kids to feel that, they don't have to, but just try it. If you try it but don't want to do it, then we'll talk about something else. But at least try it. At least try to move around, do something, activity, something that you like to do. My daughter likes to dance. She loves it so I encourage her to keep going. That's something you love to do so keep going. That's a physical activity she loves to do. I encourage her every day to do it.

**Role model.** Each of the African American single mothers who participated in my study indicated desire to be a role model for their children and others, especially others who might not otherwise have role models to show them how to live a healthy lifestyle. These single mothers wanted to encourage and teach others even though they felt there was much more for them to learn. Serving as a role model was important to them despite their expressed need for more information, to be more knowledgeable, and to have access to necessary resources.

Sometimes, I have family and friends that it the same way, where I'll call one of my friends. I know that she's been trying to lose weight. She's been sitting around doing nothing. I'll call and ask, do you want to the community college and walk around the track? Or, do you want to take the kids to the park and walk around? It's like we're walking, but at the same time, we're having conversation and catching up on not being able to talk every day... Well, that was one of the things, physical activity... reaching out to somebody else, not just for my sake but for theirs also. You never know what they may be going through. They may just need to do

something physical instead of being locked up in the house or not being able to do too much of anything.

While discussing one participant's desire to encourage her daughter, she shared that she did not want her daughter to see her sitting in the house doing nothing. She wanted to be active so that her daughter would see her and also want to be active.

Running track is something I've always loved to do. So now she likes to do it. I'll sit there and I'll play and race around the yard, playing with her to see if she can outrun me or whatever. It's fun to see it transfer from me to her, certain things. When she likes to enjoy it, it makes me feel like I taught her something else that she likes to do or something else that might trigger in her something else that she might want to do. My brothers and me will play around with the basketball and see if she wants to do it. I just kind of put things in front of her to see if she like to do them also.

### **Fear/Embarrassment**

Fear and embarrassment impeded engagement in sufficient levels of physical activity for my study participants. Ironically, fear *of* embarrassment presented difficulty. Fear factors included not learning how to, affordably, live healthy lifestyles, becoming overweight, being less physically active, and onset of illness among themselves and their children. These women indicated that their weight, body size/appearance, not knowing what activities to do, and lack of knowledge regarding properly performing activities contributed to their not being more physically active. This aligned with research findings

that personal preference such as comfort level and efficacy in ability to perform activities was as much a barrier to physical activity as were social and environmental barriers (Eugeni et al., 2013; Joseph et al., 2015). One study participant communicated her discomfort with gyms, embarrassment about not being in good enough physical condition to do Just Dance video activities at home with her children, and regarding dance classes as a school-aged child.

I don't want to do it. I still feel so uncomfortable. I don't have the cute little outfits. But I have to keep holding on to why I'm going and what I'm going for. And the more I go nobody is rude at all, like how I pictured it to be in my head. Nobody is rude. The staff there is very helpful. People, nobody is even worried that I'm there. Nobody cares.

I would probably do it three songs, not back to back, just three in a setting. Yes, and they would do song after song after song after song after song [laughing]. I would say, you guys go ahead. I was embarrassed so I didn't want to tell them that I was so tired.

I'm not a good dancer. I can keep a rhythm, but like routine dancing has never been my thing. I remember being so embarrassed that year because I don't like performing in front of other people and things like that. After that, I started ditching PE a lot. I stopped going to PE because it just wasn't good with the dancing. I didn't like it at all. There are things I wanted to do like tennis is what I really wanted to do but I didn't get put in that.

### **Summary of Research Question 1**

Research Question 1 asked, “What are African American single mothers’ perceptions of their experiences of physical activity?” Study participants identified major themes and subthemes of healthy lifestyle (disease prevention and nutrition); social support (family and culture); body/self-image; stress management (mind, emotions, thinking, and time for self); motivation/inspiration (familial Influence and role model; and fear and embarrassment. Matters that stood out as a result of the interviews were these women’s recognition of the importance of and desire to change and live healthy lifestyles, including increased physical activity; their desire to teach their children to make healthy choices; and issues such as fear and embarrassment (even when among only their children) impeding increased engagement in physical activity.

### **Research Question 2: Facilitators of Physical Activity**

Research Question 2 inquired about what single African American mothers perceive as facilitators toward their own efforts at physical activity. Research question 1 addressed many of the following facilitators. Therefore, discussion about dually noted facilitators is less in-depth in this section. As found in my research, facilitators include physical condition, comfort, social support, education and skills, access to opportunities for physical activity, and safe environments (Bracy et al., 2014; Mama et al., 2015). Interview results validated this finding and suggested additional facilitators such as experiencing benefits of, for example, less stress, better sleep, and improved future health.

The number one is being prediabetic. I think the second thing is starting to see some of the positive outcome with the sleep and the stress management and then also having children. My kids are still pretty young. I don't want any type of health issue that's within my control.

### **Healthy Lifestyle**

Although there is limited research about how African American women, especially single mothers, the research currently available indicated the need for increased understanding of how these women perceive physical activity. In interviewing study participants about their perceptions of physical activity, I found that they have an overall understanding of what a healthy lifestyle entails yet need help attaining such a lifestyle. The women interviewed conveyed their understanding of the importance of (and their desire for) living healthy lifestyles.

I enjoy being happy, alive, doing things, having fun. I just want my daughter to know it. Go out and do things. In the house, you won't learn anything. You won't experience anything. You won't so it's important to show her this is something that's exciting. She gets all excited. She does.

### **Education**

Research consistently identified health education as facilitator for physical activity among African American women. Related facilitators are exercise skills development, and use proper of home exercise equipment, according to Chen and Wang (2012). Each of the study participants expressed the need for appropriate education,



which would ideally help to improve health literacy. The desire to learn is apparent in a study participant's assertion that the more she learns, the more she appreciates learning.

The more research I do, I'm seeing more benefits of it.

**Instruction/Guidance.** Similar to the need for education regarding physical activity, results from interviews with the African American single mothers who participated in the study indicated that these women need instruction and guidance. They need to know what activities to do, how to perform the activities, and the purpose of the activities. Having such instruction and guidance helps to improve comfort and efficacy in engaging in increased levels of physical activity.

### **Motivation/Inspiration**

Interestingly, most of the study participants expressed motivation to be more physically active while also sharing about times when they are less motivated. The women openly shared of their inspirations among which are their children; less stress; desire to be healthy and role models; feeling happier; and improved body and self-image.

I do physical activity as far as walking my daughter to school, but I want to do it. What can I do different? What am I doing that I can do different? That's what I'm trying to figure out. I want my kids to be able to stay kids or actually just do it, without no problem, no hassle, not Mama telling me to get up and do it. Just do it. You have it in your mind and just go for it.

The motivation, the wanting to do it because it makes me happy to actually be doing these things. So that's where my happiness and my self-worth come from, my strength of doing things. Knowing that I can still do them brings me happiness.

**Familial influence.** My study revealed that African American single mothers' families influenced their choices, experiences, and lifestyles, these mothers' health behaviors influence their children's health and well-being. This is with regard to making healthy food choices and specifically regarding engaging in health-beneficial physical activity (Davison et al., 2013).

I was telling her [daughter], "You have a good shape. If you want to keep that shape. You need to do something about it." I have a picture and I showed her just how I used to look, just like her, at her age, same age. I was that size too. It can easily get away from you. I think she is thinking really hard about it. She loves to dance. The dance classes got too expensive.

**Family time.** While time constraints is the biggest barrier to African American women engaging in physical activity (Carter-Parker et al., 2012), prioritizing family time is among the biggest desires of the single mothers who participated in my study. These women expressed enjoying family time with their children and other family members.

...physical activity, just going out and being with the family... activities. I like going out traveling, going out doing things, basically, with my daughter and my family as much as possible.

They like it and because it's a game on the Wii and its fine. I will try to find ways to get family time in there. I generally try to get on their level. They like doing the game so they just dance. That's how we started doing it.

With my physical activity being kind of limited, I have some that I do. I run and play with my daughter. We walk to the park. I walk my dog. I walk around the neighborhood. I do a lot of walking. I do go out and play sports once in a while. I go play with my brother. We go play football, basketball, stuff like that, activities. Physical activity, just going out and being with the family, activities.

**Role model.** Since children essentially learn in the family environment in which they assume attitudes and behaviors of those with whom they live, these single mothers take on a default as role models for their children. Embracing their default status of role model, study participants strongly indicated their desire to serve as role models for their children, family members, and others.

If you don't show action, I feel like it's not going to happen. We can talk all day, but what they see is what matters. I can talk all day, and they'll think, "Okay, Mama's just talking." But if I show them what needs to be done, then they'll think, "Okay, Mama's actually moving around, too."

### **Body/Self-Image**

African American women hold culturally influenced views of their bodies and self-image. My research findings suggested that these women hold views of body and weight-related issues, such as physical activity and body size/shape, which differ from

those of the medical profession and other ethnicities. Study participants candidly shared their perspectives about their body and self-image.

It's a lot of stuff I want to change about my body, as far as physical, to get more physical, to get more healthy and stuff like that. I don't even know how to go about doing it.

It depends on what it is. If I'm exercising, what stands out is, if I do as many sit-ups or crunches as I say I'm going to do, if I complete that, the one thing that stands out in my mind is [that] I'm looking into what I'm going to look like a week from now, a month from now, just what the outcome is going to be. It makes me happy when I keep up with during the exercises as opposed to you I didn't do them.

...another thing that I do when I'm at home, I exercise whether it's sit-ups or crunches or anything like that. I am not really out to impress anybody. It's for myself.

I know it may seem kind of funny, but even every day, I look to see... like I said, I want my stomach to be flatter. I look at myself in the mirror sometimes and I think okay, I need to get rid of this little stomach I have.

## **Summary of Research Question 2**

Research Question 2 (RQ2) asked, "What do single African American mothers perceive as facilitators toward their own efforts at physical activity?" Interview results identified major themes and subthemes, including healthy lifestyle; education (instruction and guidance); motivation/inspiration (familial influence, family time, and role model);

and body/self-image. Some of these themes are the same as those identified in response to Research Question 1 as it addressed African American single mothers' perceptions of physical activity, thus representing responses to a more overarching inquiry. The resulting facilitators for Research Question 2 indicated these women's desire to live and demonstrate healthy lifestyles as well as their need for education, support, and positive self-image. While these were factors identified (to a limited degree) in my research, the findings typically referenced African American women in general as opposed to specifically regarding single mothers of LSES, whose needs differ primarily because of their multifaceted roles and responsibilities.

### **Research Question 3: Barriers to Physical Activity**

Research Question 3 inquired about what single African American mothers perceive as barriers toward their own efforts at physical activity. My research revealed barriers, including domestic responsibilities, unaffordability, and lack of social support and encouragement (Peterson, 2010; Joseph et al., 2015; Mama et al., 2015). My study results support this finding. One study participant offered a succinct summary of these barriers, which my research findings corroborated: "Time, money, and resources."

#### **Lack of Social Support**

As previously indicated, African American single mothers fulfill multiple roles, including working, being the primary source of income, caretaking of children, and often, caretaking of others. This presents challenges, particularly with lack of social support, such as not having a buddy with whom to exercise, which is among consistently

identified barriers for engaging in physical activity (Joseph et al., 2015; Peterson, 2010). In addition, lack of family support presents an issue for these women as previously expressed by a study participant who shared that she needs her mother's support but does not have it since her mother is ill and under the study participant's care.

**Family/Culture.** Family and culture are fundamental aspects of African American women's roles in the family. These women are often the backbone of the family and affected by cultural influences such that engaging in regular physical activity and making healthy food choices might not be encouraged or supported. Though previously stated, the following participant expression offered an example of the effect of family on her health and well-being.

The walk, that's where the walking started. I was actually going down hill, emotionally, and kind of physically really, too. I needed some time to clear my head. I need to start thinking about me. My focus was always on my family, not just my children but my brothers and their well-being, their children. It was putting a toll on me, stressing me to the fullest. I finally got to a point where I couldn't take anymore.

#### **Lack of Access to Resources**

Lack of access to resources hinders African American single mothers' engagement in sufficient levels of physical activity. Among barriers identified in my research are domestic and work responsibilities, financial limitations, safety concerns (Chen & Wang, 2012), and health conditions (Bethancourt et al., 2011). An interesting

research finding was that barriers to physical activity among African American women are as much preferential issues as they are the result of social and environmental inhibitors (Eugeni et al., 2013; Joseph et al., 2015). The personal barriers identified were physical condition, comfort, and ability to perform physical activity while limited minimal access to physical activity resources and opportunities (Eugeni et al., 2013). My interview data suggested supported these research results.

Working full time is hard and then getting the kids off to school and having to do all of that stuff and being a mom and making time to go to the gym. Gyms are expensive. There is the YMCA, and they are resourceful but like with everything else, they are a business. It just depends on what neighborhood you're in too, what side of town you live on, where you can go and even sometimes there are things that you need that... like getting the proper gym clothes. Gym clothes are so expensive.

**Lack of education.** Education is crucial in increasing engagement in physical activity. Contrarily, lack of education detracts from an individual's ability and willingness to be more physically active and realizing the potential health benefits. Physical activity-related interventions and health improvement programs targeting African American women often include an education component because of its importance. Including culturally appropriate education about physical activity and living overall healthy lifestyles contributes to improved healthy literacy and sustainability of

positive health behaviors. Education could have helped to shape study participant views about engagement in physical activity such that individuals are more willing to engage.

Research suggested that a benefit of appropriate education was realizing purposefulness, which Carter-Parker et al. (2012) noted as a facilitator of physical activity. Study participants communicated that knowing why (or the purpose of) physical activity is important might have led them to be more physically active.

I think it's an area where there is very little education that I am aware of. It is not one of those things where you talk about it all the time. It's almost like it's a dirty word... "exercise," ugh... Nobody wants to talk about that, ugh. "Eating healthy," ugh. I think I'm still learning.

**Lack of instruction/guidance.** Results from participant interviews provided indication that the participants wanted to be more physically active yet needed help. These single mothers needed assistance with finding ways to make time for physical activity, determining which physical activities to consider, how to correctly, and safely perform the activities, and the purpose of the activities.

I wish I had somebody, not somebody that could push me but somebody positive around. If somebody was telling me how to do it or showing me how to do it, maybe I would get up and do it, especially if I want to because everybody has it in my mind that they don't want to... don't even try it. I want to be able to at least try it. If I don't like it, I don't like it. At least just try. That's why I push my kids to at



least try. Try it. You might not like it. Everybody don't like everything but just try it.

**Lack of affordable access to opportunities for physical activity.** African American women deal with lack of access to affordable opportunities to engage in sufficient levels of physical activity. This is particularly the case with my study participants as they are of LSES. The environments and communities are often not conducive to engaging in sufficient levels of physical activity and maintaining a healthy diet.

Walking, for example, is a commonly exercised means of physical activity among African American women that requires access to opportunities for individual walking, walking programs, and having buddies. One contributor to unaffordability is the need for these mothers to have childcare.

I think that the main thing that I would like to share is I think that physical activity, it should be shared, and it should be available all across Las Vegas.

I don't think it's fair that certain areas have more than other and parts of the world have more than other. I just don't think it should be. Even that brings up the whole conversation about why these people are more privileged and have more access than the people over here [in other less affluent areas].

### **Lack of Motivation**

Experiencing lack of motivation at some point occurred for study participants for various reasons. Some of the reasons stated are lack of knowledge, instruction, and

guidance; lack of time and interest; fear and embarrassment; and injury or illness. One participant shared that she did not want to engage in physical activity due to experiences she had in school, wherein she had to participate in dance and instead of having had the opportunity to participate in activities of interest and enjoyment for her. She stated,

I'll never forget this. It was like walking into it. It was almost like it was segregated, like if you were Black, you instantly went in to dance. You were in this hip hop this semester, and then you did something else on the next semester. But I'm not a good dancer. I can keep a rhythm, but like routine dancing has never been my thing. I remember being so embarrassed that year because I don't like performing in front of other people and things like that. After that, I started ditching PE a lot. I stopped going to PE because it just wasn't good with the dancing. I didn't like it at all.

### **Injury/Illness**

For some study participants, injury or illness limited or precluded engagement in physical activity, at least temporarily. One participant shared that a work-related back injury limits her ability to engage in physical activity. She also noted that she is able to walk (though not as long as she used to) and remains under her medical professional's care. Pain in her knee further limited her ability to be physically active. Illness or ailment interfered with the desire and ability to be active.

I would say the barriers of my physical activity would probably be me not being able to be outside as long and as much. My body, my joints, they do lock up. Certain times, it would be ok to do. Sometimes is not.

I get migraines. Just depends on what's going on the day before. I could just wake up and if I wake up and I have a headache, that puts me down. Any type of little movement or noise or anything like that, that limits me from getting up and doing anything.

### **Summary of Research Question 3**

Research Question 3 (RQ3) asked, “What do single African American mothers perceive as barriers toward their own efforts at physical activity?” Many of the major themes and subthemes revealed in response to Research Question 3 indicate lack of the themes identified in response to Research Questions 1 and 2. Among the themes resulting for Research Question 3 are lack of social support (family and culture); lack of access to resources (lack of: education, instruction and guidance, affordable access to opportunities for physical activity); lack of motivation; and injury and illness. Hence, a lack of essential resources appears to be a primary impedance to African American single mothers’ engagement in sufficient levels of physical activity.

### **Summary of Research Questions**

In summary, this chapter included an overview of the study purpose and presentation of the key results regarding African American single mothers’ perceptions of physical activity. I described the research setting, demographic information, data collection, data analysis, and evidence of trustworthiness. The chapter concluded with the results. The purpose of research questions was to elicit how African American single mother perceive physical activity. Study results suggested an overarching theme

indicating that these women strongly desire education, support, and healthier living though, factoring in the dynamics of being African American single mothers of LSES, are unable to realize their desires.

An apparent issue seemed to be that these women need increased health literacy and empowerment to attain their health-related aspirations. Thus, interview results helped with deriving exhaustive description of an overarching theme as described by study participants. Study results allowed for identifying the essence of experience with the phenomenon of perceptions of physical activity as articulated by my study participants and allowed for rich, in-depth description for presenting the information.

Chapter 5 encompasses discussion, conclusion, and recommendations. Included in this chapter is explanation of my interpretation of the findings. Subsequently, I address study limitations, recommendations, and implications. Lastly, I provide the chapter conclusion.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

The purpose of this qualitative study was to increase understanding of African American single mothers' perceptions of physical activity, with particular regard to mothers of LSES and with female children. This study was inspired in part by the increasing prevalence of the onset of preventable chronic diseases such as obesity among African American women. Extensive research suggested that this issue presents a health and economic concern for the United States (Lemacks et al., 2013). Physical activity is also a well-researched topic; however, only limited research specifically addresses physical activity as primary factor in preventing obesity and other weight-related preventable disease among African American women. Ironically, African American women represent the group among whom obesity is most prevalent and engagement in sufficient levels of physical activity is lowest relative to other ethnic populations (Lemacks et al., 2013). Hence, this study responded to the opportunity for additional research regarding physical activity that is specific to African American women.

African American women want to be physically active, have healthy eating habits, experience overall well-being, and ensure their children live healthy lifestyles (Dharod et al., 2011; Lemacks et al., 2013). This proved to be true for study participants. These women were African American single mothers of LSES, who had at least one school-aged daughter, and resided in Clark County, Nevada. This locality experienced concern regarding the concerning number of insufficiently physically active and obese

adults and children (SNHD, 2012). Hence, three overarching research questions provided focus for the study, helped to convey the study aim, and afforded responding to the study problem of the need for increased understanding regarding how African American single mothers perceive physical activity. These questions were:

1. What are African American single mothers' perceptions of their experiences of physical activity?
2. What do single African American mothers perceive as facilitators toward their own efforts at physical activity?
3. What do single African American mothers perceive as barriers toward their own efforts at physical activity?

I used criterion sampling, a purposive sampling strategy, as my method for selecting participants. All of the participants self-reported answers that met the prespecified criteria for participation. The choice of this strategy aligned with Mama et al.'s (2015) study conducted to gain insight to understanding physical activity adoption in overweight and obese African American and Hispanic women, which employed a purposive sampling strategy (Mama et al., 2015). Similarly, Suri (2011) described criterion sampling as effective for working with a group among which each individual meets specific, predetermined criteria. Each individual of the group also had lived experience with the phenomenon under study, as suggested by Palinkas et al. (2013).

The qualitative phenomenological design allowed for a rich, thick description of the shared lived experiences of African American single mothers and their perceptions of

the phenomenon of physical activity. I found that a qualitative phenomenological study design worked, similar to McWhinney et al.'s (2011) findings on the perceptions of parents and children regarding barriers of physical activity in rural communities. A phenomenological research design afforded an exploratory approach to exhaustively describing the essence of lived experiences with the phenomenon for my study, as recommended by Carolan, Gill, and Steele (2012). I successfully conducted private, semistructured, open-ended interviews to collect data. Therefore, the nature of this study was to explore and describe in depth the essence of perceptions of physical activity from the perspective of the study participants.

### **Study Key Findings**

The key findings from this study unveiled the lived experiences of African American single mothers in Clark County, Nevada, revealing their perceptions of the phenomenon of physical activity. Eight overall themes emerged during analysis, aligning with the importance of social determinants of health; these themes effectively captured these mothers' perceptions of physical activity. These themes include healthy lifestyle, social support, resources and education, body/self-image, stress management, fear and embarrassment, motivation/inspiration, and injury or illness.

### **Research Question 1: Perceptions of Physical Activity**

Research Question 1 was particularly important in that responses represented the women's experiences with physical activity as expressed through their views, perceptions, and beliefs without the boundaries of a question focused on a specific topic

are Research Questions 2 and 3. Research question 1 afforded the opportunity to discover new or different information for addressing the research problem. Research Questions 2 and 3 specifically pertained to facilitators and barriers of physical activity, respectively, eliciting information helpful for the study though limited to those two topics.

For Research Question 1, a key finding was that African American single mothers *want* to live healthy lifestyles that include engagement in levels of physical activity that are sufficient for realizing health benefits. In addition, a key finding confirming research was that these women have culturally ascribed meanings of physical activity. Another key finding, which the research base indicated, was that the participating African American women were self-protective and not initially trusting.

Physical activity is a sensitive subject among African American women, which represents another key finding that confirms existing research. A key finding not consistently identified in prior research was that the common reasons cited why physical activity is a sensitive subject were:

- these women lack confidence in talking about it, and
- they rarely have or partake of opportunities openly talk about it.

Furthermore, I discovered that African American single mothers want to know about healthy lifestyles and overall well-being instead of solely about single aspects such as physical activity. Another key finding was that these women wanted to be empowered to do what is necessary for their and their children's healthy living.



Answering Research Question 1 produced several major themes and subthemes) identifying these women's perceptions of:

- healthy lifestyle/disease prevention (nutrition);
- education (instruction/guidance) social support (family and culture);
- body/self-image and stress management (mind, emotions, thinking, and time for self);
- motivation/inspiration (familial influence, family time, and role model); and
- fear/embarrassment.

Some of these themes overlap with themes subsequently discovered for Research Questions 2 and 3, primarily because “perceptions” represents an umbrella-type topic. Likewise, some themes identified for Research Questions 2 and 3 did not occur as major themes for Research Questions 1 and 2. Examples of this are education and access to affordable physical activity opportunities.

### **Research Question 2: Facilitators of Physical Activity**

Research Question 2 allowed me to discover factors, as represented by themes and subthemes that facilitate African American single mother engagement in physical activity, therefore making it possible to be physically active. I uncovered a key finding affirming African American single mothers' children and being a role model as primary sources of inspiration. I discovered a second key finding of these women's need for access to resources with particular regard to education about the importance of physical activity; instruction/guidance for physical activities and healthy eating; social support;

and encouragement. Research Question 2 elicited major themes and subthemes of healthy lifestyle; education (instruction and guidance); motivation/inspiration (familial influence, family time, and role model); and body/self-image.

### **Research Question 3: Barriers to Physical Activity**

Research Question 3 was a means for identifying factors that impeded engagement in physical activity for African American single mothers. A key finding was that, although these women sometimes lack motivation, the primary reasons given for their not engaging in sufficient levels of physical activity pertained to lack of education, instruction, access to resources, and support. An unexpected key finding was that time constraints, which research indicated as the primary barrier to physical activity, was identified as a barrier among the study participants but not as a prevailing barrier. The impeding factors, as represented by themes and subthemes, included:

- lack of social support (family and culture),
- lack of access to resources (education, instruction/guidance, and affordable access to opportunities for physical activity),
- lack of motivation, and
- injury and illness.

### **Interpretation of the Findings**

The aim of this descriptive, phenomenological qualitative study was to help increase understanding of African American single mothers' perceptions of physical activity. Results from the study could inform more culturally appropriate, effective

design of health improvement initiatives regarding increasing physical activity and preventing weight-related health issues such as obesity. Such initiative might help to decrease disparity effect on these women.

The study findings convey African American single mother lived experiences with the phenomenon of perceptions of physical activity as supported by significant statements that each woman shared. These women's perceptions, viewpoints, and beliefs expressed confirm and extend research results identified during the literature review. Various factors affect the degree to which African American women engage in physical activity and their overall well-being (Benthancourt et al., 2014; Golden & Earp, 2012). These women identified factors that make engaging in physical activity possible as well as factors that impede physical activity.

The study results aligned with my research findings that indicated disparate effect on these women. Also identified were challenges pertaining to the dynamics of their ethnicity, LSES, and single mother status. African American single mothers who participated in the study communicated their need for conditions conducive to lifestyles of healthy, physically active people. Such a lifestyle requires action at multiple levels, including sociocultural, economic, and physical environment, and governing policy, therefore indicating the relevance and importance of social determinants of health. Hence, addressing the physical activity-related needs of African American single mothers occurred through employing the HBM as a conceptual framework.

## **Conceptual Framework**

The HBM previously illustrated in Figure 1 provided a conceptual framework for this study. The model entails six constructs of perceived susceptibility, perceived severity, perceived benefits, perceived barriers, self-efficacy, and cues to action. These constructs allowed for identifying themes and patterns to address the research questions, and research problem in addition to contributing to increased understanding of how African American single mothers perceive physical activity.

### **Research Question 1: Perceptions of Physical Activity**

Research question 1 regarded African American single mothers' perceptions of physical activity and, therefore, represented an overarching question. Five of the six HBM constructs related to this research question are perceived susceptibility, perceived severity, perceived benefits, self-efficacy, and cues to action. Each of the nine interview questions (IQ 1–IQ9) elicited information aligned with application of the HBM.

Research question 1, regarding African American single mothers' perceptions of physical activity, resulted in identifying pertinent key findings. Firstly, African American single mothers desired healthy lifestyles, versus being ill, that include engagement in sufficient levels of physical activity, which indicated their need for information, resources, and ability to initiate and sustain physical activity. This need takes into account the opportunity for improved health literacy that might comprise components such as evidence-based behavior change, education about preventable chronic disease,

and realistic expectations (to help minimize discouragement, frustration, and stress while encouraging sustainable healthy behaviors).

Secondly, these women's culturally ascribed meanings of physical activity vary for those of the medical profession, for example including thinking and motivating, as expressed by study participants. My interpretation is that thinking and motivation encourage and undergird physical activity that involves muscles and uses energy, such as walking or a sport. What I view as important here is alignment of this perspective with findings from my research, which indicated that African American women's views and perceptions of physical activity differ from those of the medical profession as suggested in Lynch and Kane (2014) research. I further interpreted this as suggesting need for health improvement programming that educates and enhances communication among African American single mothers and health care professionals.

Thirdly, in alignment with research during my literature review, I found that African American women are self-protective and not initially trusting. This finding indicated that these women might not be comfortable genuinely expressing their needs. Complementing this interpretation is indication that these would might not provide information that could inform programming of more culturally appropriate and effective health improvement interventions.

Different from my research findings, however, was a fourth key finding pertaining to the study participants' expressions regarding the degree of importance of their need for establishing trust and rapport prior to their opening up and genuinely

sharing. I gleaned from my observation that these single mothers need to know that health professionals are genuine and serious about helping to meet their physical activity-related needs.

The fifth key finding suggested that physical activity is a sensitive subject among African American women. During interviews, it took a few minutes for each woman to warm up to the point of candidly sharing about her experiences with physical activity. Each of the women had tears in their eyes at some point during the interview while reflecting on experiences yet wanted to continue. Asking probing questions helped with maintaining connection and flow. I recognized changes in the women's body language and voices as they became comfortable and shared. My interpretation of this experience is that it is important to meet with these women as it affords opportunity for connection and building trust. Fostering such a relationship and environment indicated to the single mothers the sincerity of researchers and health professionals in genuinely endeavoring to help them meet their physical activity-related needs. At the end of each interview, each woman expressed that the experience was positively different from what she expected. This could indicate that these women found the interviews and study worthwhile and might consider participating in or contributing in some way to future research.

The sixth key finding, not consistently identified in prior research, was that common reasons why physical activity is a sensitive subject are 1) these women lack confidence in talking about it and 2) they rarely have or partake of opportunities openly

talk about it. I interpret this finding as affording an opportunity for researchers to employ means of culturally specific data collection.

Furthermore, the seventh discovery was that African American single mothers want to know about healthy lifestyles and overall well-being instead of solely about single aspects such as physical activity. My interpretation of this finding is that these women realize that a lifestyle entails other aspects, including for example, healthy eating and stress management, both of which were factors expressed as important during the interviews. Hence, there is opportunity for enhancing health improvement programs while possibly implicating future research.

The eighth and final key finding addressing research question 1 was that these women want to be empowered for living healthy lifestyles. My interpretation of this finding is that African American single mothers want to learn and be able to do what is necessary for them and their children to live healthy lifestyles.

### **Research Question 2: Facilitators of Physical Activity**

Research question 2 inquired about facilitators for African American single mother engagement in physical activity. Three of the six HBM constructs relating to research question 2 are perceived benefits, self-efficacy, and cues to action. Interview question 4 (IQ4) elicited information aligned with application of the HBM.

Addressing research question 2, regarding facilitators of physical activity, revealed a key finding affirming African American single mothers' children and being a role model as primary sources of inspiration. I interpreted the key finding to suggest the

mothers' desire for their children to learn not only from what they say but also from their observations of their mothers' health-related behaviors. A second key finding was these women's need for access to resources (especially education conveying the importance of physical activity); instruction/guidance for exercising and healthy eating; social support; and encouragement. Some of the mothers expressed that they wish they had long ago even the little knowledge they currently have regarding living a healthy lifestyle and the role of physical activity in that. These women want need to know about incorporating more physical activity into their daily lives (e.g., what to do, when to do it, how to do it, and why they should do it). Not knowing seemingly contributed to low self-confidence and their decision not to be more physically active.

While reflecting and sharing about their experiences with physical activity, the women discovered things about themselves they had not previously considered. For example, one participant shared that she realized while talking during her interview that she loves walking because it is her time alone, allowing her to talk with God, reflect on memories of her mother, engage in physical activity, clear her mind, and reduce stress. I interpreted this mother's expression as indicating the meaning in her walking as an intrinsic motivator that could serve as a facilitator for her walking more frequently. Intrinsic motivation, coupled with social support influence physical activity (Mama et al., 2015).



### **Research Question 3: Barriers of Physical Activity**

Research question 3 investigated barriers to African American single mother efforts at physical activity. Five of the six HBM constructs related to this research question are perceived susceptibility, perceived severity, perceived barriers, self-efficacy, and cues to action. Interview question 5 (IQ5) elicited information aligned with application of the HBM.

I uncovered a key finding that, despite some lack motivation among African American single mothers, primary reasons for their limited engagement in physical activity relate to lack of access to resources, including education, instruction/guidance, support, and encouragement. I interpreted this finding as indicating absence of knowledge, skills, tools, resources, and abilities, thus absence of empowerment, for attaining sufficient levels of physical activity. An unexpected key finding was that time constraints, which research indicated as the primary barrier to physical activity, was identified as a barrier among the study participants but not as a prevailing barrier. This finding could indicate the need for culturally appropriate health improvement initiatives that focus on specific subgroups, such as African American single mothers of LSES, rather than the umbrella group of African American women.

### **Summary of Interpretation of Findings**

In summarizing regarding my interpretations, a primary observation as the researcher was that each woman needed time early in the interview to become comfortable with openly sharing. An important recognition was these women's need for

co-creating an environment of trust and rapport, which occurred with each woman. Changes in each woman's demeanor and body language indicated that she was a relaxed and openly sharing in conversational manner. After her interview, each woman expressed her appreciation for the opportunity to share about what is meaningful for her.

My overall interpretation is that African American single mothers' primary physical activity-related needs have yet to be met. These women wanted to express their views, with someone attentively listening. They wanted a means for voicing their thoughts, ideas, and needs. They want to be in a position in which they are empowered and able to live healthy lifestyles. They desire to engage in sufficient levels of physical activity, teach their children, and be role models for their children and others.

### **Limitations of the Study**

This study explored the lived experiences with and perceptions of African American single mothers' perceptions of physical activity with consideration of facilitators and barriers to their efforts at engaging in physical activity. My fulfilling the role of researcher and as the primary data collection instrument, possibly decreasing dependability and introducing instrumentation bias, presented a study limitation.

Secondly, the data collected represents self-reported information.

The small sample size of 6-10 participants for the Clark County population of African American single mothers of LSES and with female children posed the third limitation. This indicated that the research might not be generalizable, thereby possibly impacting transferability. Another limitation was that sensitivity of the research topic,

competing priorities such as work, time constraints, and transportation may have affected interest in or ability to participate in the study. However, research validated a range of 6–10 participants as appropriate for reaching saturation for qualitative phenomenological study (Marshall et al., 2013). Saturation occurred for this study by participant 5 with validation of saturation occurring with participant 6. Factoring into the decision to interview six participants for this study was the importance of not exceeding saturation in order to minimize chances of rendering too much information, which according to Guest et al. (2006) and Marshall et al. (2013), could detract from the thorough, in-depth data analysis that is core in effective qualitative research.

### **Recommendations**

Insufficient physical activity is an increasingly prevalent issue that disparately affects African American women, specifically single mothers of LSES and who have a female children. Despite the plethora of research about the benefits of physical activity, adverse impacts of physical inactivity, the onset of preventable chronic disease continues to increase among these women and, consequently, their female children. Some findings from this study supports research results revealed from the literature review in Chapter 2. However, some findings do not support prior research, and some findings expand upon the research base.

Due to sensitivity of the weight-related issues and self-protective stance among African American women and their reluctance to participate in related studies, one recommendation for consideration is employment of more personable means of collecting

data. Such a means might begin with time allocated specifically for building trust and rapport so the participants are comfortable and willing to respond to interview questions. This study confirmed the issue of lack of communication between African American women and medical professionals, resulting from differing views of weight-related terms and body size/body image. This could result in inappropriate or ineffectively designed health improvement initiative. Therefore, a recommendation is to consider increased application of best practices that incorporate use of pertinent terminology that includes these women's views, meanings, or definitions. It would be crucial to include expanding the definition of physical activity to be more inclusive, incorporating activities such as housework, work-related physical activities, leisure sports-related activities, and routine activities with children involved.

Correspondingly, study participants consistently identified work as a means of physical activity, which also supports previous research. Incorporating opportunities for physical activity into the workday for these women could help, especially regarding time constraints, which research shows as a primary barrier. Another recommendation is to apply an ecological approach to designing culturally appropriate interventions that are specific to single mothers of LSES. These interventions might involve walking and the children since walking is primary for this group and because their children, family time, and working within time constraints are important factors. The programs would also include components of education, instruction, guidance, and printable, intuitive, physical activity-related materials. The same would be applicable for other activities encouraging

family time and involving children as it is imperative for these women have the education, skills, resources, and ability needed for helping their children to establish healthy behaviors.

### **Future research**

A future research opportunity is to explore African American single mother ascribed meanings of physical activity in effort to determine if weight-related issues exist. Secondly, a future research opportunity exists to study how these women perceive body (e.g., size, image, etc.) and weigh-related issues, factoring in cultural specificity. Thirdly, there is opportunity for researching African American female children perceptions of body image and size, which tend to differ from perceptions of female children of other ethnicities, as is the case with African American women. These research opportunities could help to facilitate more effective to planning, implementation, and evaluation of culturally appropriate health improvement programs that effectively produce desired health outcomes.

### **Implications**

Application of this study aligned with HHS, CDC, First Lady Michelle Obama, and other health-related governing agency initiatives to curtail of the national health and financial burdens resulting from the issue of preventable chronic health disease, particularly among African American women. These women represent the group most disparately impacted, thus among whom preventable health issues such as physical inactivity and obesity are most prevalent. This study focused on African American single

mothers, namely those with at least one female child, of low LSES, and residing in Clark County, Nevada. Curtailing the issues calls for understanding how these women perceive physical activity, which according to Komar-Samardzija et al. (2012), entails taking a culturally appropriate ecological approach with specific regard to social-cultural considerations and body image.

Regarding her *Let's Move* initiative in 2010, First Lady Michelle Obama indicated severity of the problem in her statement, “The physical and emotional health of an entire generation and the economic health and security of our nation is at stake” (letsmove.gov, n.d., para. 1). Familial influence of African American mothers is a crucial factor in preventing such generational health issues. Therefore, an ecological approach could provide for preventing possibly imminent generational impact of the health, which African American children are at greater risk for when compared with children of other ethnicities (Ickes & Sharma, 2011). Among potential results are healthier mothers, healthier children, a healthier nation, and decreased national financial burden.

### **Potential for Positive Social Change**

This study could affect significant social change as dissemination of study findings may inform health care administrators’ strategic development of health education and services programming related to African American single mother engagement in physical activity. In addition, study results could be useful for programming of health education and improvement initiatives in health improvement-oriented communities. These communities aim to improve health education (thus health

literacy), increase physical activity, and improve health outcomes. The goal is to minimize preventable chronic health issues among African American women. Resulting knowledge from this study could contribute to preventing chronic health diseases among children of African American women, which further implicates social change by minimizing potentially imminent generational health adversities.

### **Methodological, Theoretical, and/or Empirical Implications**

African American women's roles in their families and culture are foundational and significantly influential (Barr-Anderson et al., 2013). This study rendered results that could contribute to positive social change as mothers, children, other family/community members, community members, and socio-cultural groups learn and adapt evidence-based sustainable health behaviors. Research indicated that such behavior change could result in social, cultural, environmental, and policy change (Barr-Anderson et al., 2013).

### **Recommendations for Practice**

The issue of increasing onset of preventable health disease among African American women and their children necessitates a call for preventive action. Hence, my recommendation for professional practice entails employment of evidence-based, culturally appropriate intervention and programming undergirded by behavior change (various levels) and sustainment theoretical/methodological frameworks, integrating for example, the HBM, TTM, and SCT. Such frameworks provide for an ecological approach, which research consistently indicated (Barr-Anderson et al., 2013; Mama et al., 2015; Moran et al., 2014; Versey, 2014) offers a more thorough, efficient, and effective

means for helping to ensure successful health behavior adaptation, change, and sustainability. Moreover, an ecological approach could help to increase opportunity for maximizing imminent social change for greater good by contributing to increased knowledge, best practices, and governing policy.

### **Conclusion**

This descriptive phenomenological study explored the lived experiences of African American single mothers of LSES regarding their perceptions of physical activity. In response to the interview questions designed to address the research problem of limited research about their perceptions of physical activity, these women openly and candidly shared about their knowledge, needs, desires, and beliefs. The health belief model provided theoretical foundation and served as a contextual lens for investigating African American single mothers' perceptions of physical activity, thus the phenomenon common among these women.

Conducting this study afforded exhaustively describing an overarching theme signifying African American single mothers need for empowerment for healthier living in spite obstacles resulting from the various dynamics associated with being a single mother of LSES. These women expressed their need and desire for education, support, access to physical activity opportunities, and access to other resources to help them overcome their struggle with attaining sufficient physical activity levels and living a healthy lifestyle. The research process employed proved conducive to identifying the essence of experience with the phenomenon of perceptions of physical activity as articulated by



these women. Furthermore, this study afforded rich, in-depth description for presenting the information rendered.

Key findings regarding the African American single mothers' perceptions of physical activity pertain to overall topics of healthy lifestyle; social support; resources and education; body/self-image; stress management; fear and embarrassment; motivation/inspiration; and injury or illness. Further research and addressing these topics through evidence-based, ecological, health behavior-related change initiatives could increase knowledge, health literacy, and engagement in physical activity. Other outcomes might include change in governing policies to support related endeavors. Such policies could help to decrease the disparate effect of weight-related chronic health issues among African American women and their children, ultimately contributing to a decrease in health and financial burden on the United States. Considering these benefits, increased understanding African American single mothers' perceptions of physical activity is an important contribution to the knowledge base. Positive social change on a societal level is possible calling for full engagement of African American single mothers, healthcare practitioners, researchers, and policy makers.

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## Appendix A: Letter of Intent

Sheryl Richard  
Ph.D. Student, Health Services – Community Health  
Walden University  
sheryl.richard@waldenu.edu

November 28, 2015

Dear Study Participant:

I am Sheryl Richard. I am a Ph.D. student in Walden University's Health Services – Community Health program. I am conducting my doctoral research. I will collect information about the African American single mothers' perceptions of Physical Activity.

Please know that your participation in this study is completely voluntary. I also want you to know that you may withdraw from the study at any time. You may also withdraw for any reason. There will be no consequences if you withdraw. You may choose not to respond to this letter. There will be no consequences if you do not want to participate.

There will be a 45-to 90-minute in-person interview at a location that you and I agree upon. I will record the interview. I will then write out your recorded responses. This is the process of transcribing. Next, I will compare the written transcription to the audiotape recording. This will help to ensure that I accurately captured what you shared.

I will ensure your confidentiality during research and in the resulting research report. As a study participant, you will receive a \$10 Walmart gift card. I will provide the gift card at the beginning of the interview process. The gift card is a token of appreciation.

If you would like to participate in the study, please read and complete the attached informed consent form. Then, email the completed form to me. I welcome you to email me at sheryl.richard@waldenu.edu with questions.

The Walden University Institutional Review Board issued approval code for this study is 11-25-15-0266374. The code is valid through 11-26-2016.

I appreciate your time. I also appreciate your consideration of participating in the study.

Sincerely,  
*Sheryl Richard*  
Sheryl Richard

## Appendix B: Recruitment Announcement

**Are you an African American Single Mother?**

Might you be willing share about your experience with physical activity? If so, this research study may be of interest to you. Consider participating in this research study focused on learning about *your* perceptions of physical activity.

You may be eligible for this study if you:

- ✓ Are an African American single mother
- ✓ Between 18-35 years of age;
- ✓ Are not family members of the researcher
- ✓ Are of low socioeconomic status
- ✓ Have experience with physical activity;
- ✓ Reside in a zip code of 89106 or 89030;
- ✓ Have at least one school-aged female child;
- ✓ Are able read, write, and speak in English; and
- ✓ Agree to recording of interviews.

Please know that your participation in this study is completely voluntary, and you can withdraw at any time and for any reason. There will be no consequences to you if you decide not to participate. All information will remain confidential. Participation in this study involves an approximate 10-minute telephone eligibility questionnaire for completion by individuals who are interested in study participation. Study participants will receive, as token of appreciation, a \$10 Walmart gift card at the beginning of the interview process.

I welcome you to contact me, Sheryl Richard, at [sheryl.richard@waldenu.edu](mailto:sheryl.richard@waldenu.edu) for with any questions.

The Walden University Institutional Review Board found this research to be acceptable and issued approval code for this study is 11-25-15-0266374 and is valid through 11-26-2016.

Thank you for your time and consideration of this research opportunity.

Sincerely,

*Sheryl Richard*

Sheryl Richard

## Appendix C: Potential Participant Screening Questionnaire

Sheryl Richard

Date: 07-15-2015

Opening verbiage:

The questions in this questionnaire will guide determination of whether interested, prospective study participants meet the inclusion criteria and are therefore eligible for participation.

Recruitment Screening Questions:

Question purpose: To identify that there is lived experience with physical activity

Question: What is your experience with physical activity?  
\_\_\_\_\_

Question purpose: To identify self-reported race/ethnicity

Question: What is your race/ethnicity? \_\_\_\_\_

Question purpose: To identify [marital] status?

Question: Which of these describe your status?

➤ Single Married Divorced

Question purpose: To identify status as an African American single mother with at least one school-aged female child

Question 1: How many school-aged female children do you have?  
\_\_\_\_\_

Question 2: What is/are the ages of your school-aged female child(ren)?  
\_\_\_\_\_

Question purpose: To identify whether or not a family member of the researcher

Question: Are or might you be a family member of the researcher?

Question purpose: To identify prospective participant age

Question: What is your age? \_\_\_\_\_

Question purpose: To identify low socioeconomic status

Question: Which of these describe your current income status?

\$0-\$15,000 \$15,001-\$25,000 \$25,001-\$40,000 \$40,001-\$55,000 \$55,001-\$70,000  
\$70,000+

Question purpose: To identify residential zip code

Question: Do you reside in a zip code of 89106 or 89030? OR What is your zip code?

\_\_\_\_\_

Question purpose: To identify ability to read, write, and speak in English

Question: Are you able read, write, and speak in English? OR What language(s) do you read, write, and speak?

\_\_\_\_\_

Question purpose: To identify agreement with recording of interviews

Question: Do you agree to recording of your interview(s)? \_\_\_\_\_



## Appendix D: Informed Consent Form

Dear Participant:

I am Sheryl Richard, a PhD student in Health Services at Walden University. I am conducting research as part of my PhD program. I invite you to participate in my research study.

Study Background:

*The purpose of this study is to understand how African American single mothers perceive physical activity.*

Selecting Participants:

Study participants are African American single mothers. They are between 18-35 years old. They have low income. These mothers have experience with physical activity. They live in a zip code of 89106 or 89030. They have at least one school age daughter. In addition, these women can read, write, and speak in English. They are not family members of the researcher. They agree with recording the interviews.

Voluntary Participation:

This is an informed consent process. This purpose of this form is to help you understand the study and decide if you want to participate. Keep in mind that you may withdraw at any time. You may also withdraw for any reason. You will not have consequences if you decide to withdraw.

Duration:

The study duration is approximately two to four weeks.

Procedures:

There will be a brief telephone screening that will last no more than 10 minutes. The screening results will indicate whether you are eligible to participate in the study. Then, there will be a face-to-face interview that will last 45 – 90 minutes. You may respond to the interview questions however you choose. Please feel free to answer only the questions that you want to answer. I want you to know that there is no right or wrong response. I

encourage you to relax and be open and honest. I will do the same. Again, please feel free to answer only the questions that you want to answer.

I will record the interview. Next, I will write out your recorded responses. This is the process of transcribing. I will then compare the written transcript with the audiotape. This will help to ensure that I accurately capture your responses.

#### Sample Interview Question:

What would you like to share about your experience with physical activity?

#### Risks, Benefits, and Sharing the Results:

Minimal risks are associated with participating in the study. An example of such risks is that you might feel sad when thinking about past experiences. Your safety and well-being are not at risk by participating in the study.

I will not share anything you tell me with anyone outside of the research team. I will provide a 1 to 2-page summary of research results for you and your community. I will later share the information with the public. University and public health educators who aim to increase physical activity will have access to research results. This could influence healthcare improvements for African American single mothers.

#### Incentive:

I will provide you with a \$10 Walmart gift card at the beginning of the interview. The gift card is an expression of appreciation.

#### Confidentiality and Privacy:

I will keep the information you provide confidential during the research and in the resulting research report. I will not include your name or other personal information. I will store information in a secure computer system. I will store the computer system in a secure physical location for at least 5 years. This is in agreement with university requirements.

I will keep private any information you share unless I believe doing so is harmful to someone. In that case, I would then report the situation to proper authorities.

#### Contact Information:

Please do not hesitate to ask me questions. If you want to talk privately about your rights as a study participant, you may contact Dr. Leilani Endicott at 1-800-925-3368, extension 3121210.

The Walden University IRB approval code for this study is 11-25-15-0266374. The approval will expire on 11-26-2015.

Please feel free to keep a copy of this informed consent for your records.

Statement of Consent:

I have read and understand the above information. My signature below indicates that I meet the criteria for this research study and would like to participate.

Participant's Name (printed): \_\_\_\_\_

Date of Consent: \_\_\_\_\_

Participant's Signature: \_\_\_\_\_

Researcher's Signature: \_\_\_\_\_

## Appendix E: Qualitative Interview Guide

This purpose of this questionnaire is to guide the interview process in order to obtain information that responds to the research question, "How do African American single mothers of low socioeconomic status, with female children, perceive and describe their experience of physical activity? The questions aim to encourage participant to share her story, which will provide insight regarding these women's lived experiences with physical activity. For these interviews, physical activity is any bodily movement that increases the heart rate or causes one to breathe heavier. I will probe as needed, for example, to keep participant responses on topic or for clarification of a response.

IQ1: Opening question: How would you describe your experience with physical activity?

IQ2: What is the first thing that comes to mind about your experience when I say, "physical activity?"

IQ3: What physical (bodily) or emotional changes resulted from your experience with physical activity?

IQ4: What do you perceive as facilitators toward your own efforts at physical activity?

IQ5: What do perceive as barriers toward your own efforts at physical activity?

IQ6: What was the outcome of your experience with physical activity?

IQ7: What about the experience stood out for you?

IQ8: How did your experience affect others in your life?

IQ9: What else would you like to share about your experience with physical activity?

(Moustakas, 1994)

To conclude, I will debrief with the study participants, providing information from the informed consent form, description of what happens next, how I will contact them for follow-up and verification, and explaining how I will ensure protection of their data.

## Appendix F: Mental Health Resources Listing

Cambridge Family Health Center - NVHC  
3900 Cambridge Ave Suite 101  
Las Vegas NV 89119  
(702) 307-5415  
<http://nevadahealthcenters.org/locations/wic-clinics/>

ClearWaters Family Guidance and Wellness Centers  
(702) 778-5300  
3606 N. Ranchi Dr. Ste. 142  
Las Vegas, NV 89130  
[trina@clearwaterscounseling.com](mailto:trina@clearwaterscounseling.com)

Community Counseling Center of Southern Nevada  
714 E. Sahara Ave  
Las Vegas, NV 89104  
(702) 369-8700  
[Ccofsn.wix.com](http://Ccofsn.wix.com)

Community Outreach Medical Center  
1140 Almond Tree Ln Suite 306  
Las Vegas NV 89104  
(702) 657-3873  
<http://www.nvcomc.org/default.html>

Guadalupe Medical Centers - Charleston  
1219 E Charleston Blvd  
Las Vegas NV 89104  
(702) 384-1110  
<http://www.guadalupe-med.com/locations.html>

Operation H.O.P.E.  
970 E Sahara  
Las Vegas NV 89104  
702-952-9564  
<http://www.operationhopeinc.com/contact-us>

The Shade Tree (Women's Resources)  
1 West Owens  
North Las Vegas, NA 89030  
(702) 385-0072  
fd@theshadetree.org