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# AFRICAN AMERICAN CHILD AND ADOLESCENT OBESITY: THE PARENT'S PERSPECTIVE

by

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# A DISSERTATION

Submitted to the graduate faculty of The University of Alabama at Birmingham, in partial fulfillment of the requirements for the degree of Doctor of Philosophy

BIRMINGHAM, ALABAMA

2017

# AFRICAN AMERICAN CHILD AND ADOLESCENT OBESITY: THE PARENT'S PERSPECTIVE

# ALICE M. AUSTIN

#### DOCTOR OF PHILOSOPHY IN NURSING

## **ABSTRACT**

Nearly 36% of African American children ages 2 to 19 are overweight or obese. Childhood obesity results in children with social and psychological disorders, chronic disease, and an increase in morbidity and mortality. Solutions have been offered but none have made a significant impact on African American children living in the Southern United States. Studies that implement life style change produce short-term reductions in African American children but few show life-long change. Parents are responsible for making lifestyle choices for children, it is imperative to understand parental perceptions of child and adolescent obesity and its relationship to lifestyle change.

The constructivist paradigm was used to grasps the knowledge of African American's interpretation of their reality, their beliefs and experiences in their environment related to the phenomenon of child and adolescent obesity. A modified ethnographic approach was employed to understand and examine the cultural roots of the phenomena of child and adolescent obesity in African American children. A purposive sample of 15 African American parent/caregivers and 15 of their children, aged 6-19, were recruited from four faith-based facilities. A data form was used to collect the child's actual height, weight and calculated BMI. An interview guide of open-ended questions composed by the researcher was used to facilitate focus group discussions.

Recorded interviews were transcribed and reviewed for accurate reflection of the focus group interviews. Field notes, journaling, observations, and transcripts were

reviewed observing for themes. The themes were coded based on the interviews, patterns

of thought, and behavior expressed by the participants to understand the perception that

African American parents have related to child and adolescent obesity. Data were

uploaded into NVivo 11 to assist with capturing, organizing, and finalizing analysis of

collected data. Final data analysis results revealed themes: false perception, culture and

traditions, time and convenience, and expenses.

Culture and traditions were found to be very significant to this African American

population thus possibly contributing to child and adolescent obesity. Further studies on

African Americans, their perceptions and perspectives of child and adolescent obesity

will help researchers understand and implement culturally appropriate interventions in

this population.

Keywords: African American, childhood obesity, perception, perspectives, culture

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# DEDICATION

I dedicated this dissertation to my daughter for all of her patience, love, and support.

#### **ACKNOWLEDGMENTS**

First, I would like to thank God, without Him none of this would have been possible. I have been patiently guided by the scripture "I can do all things through Christ who strengthens me" Philippians 4:13; "What is impossible with man is possible with God" Luke 18:27; and "Trust in the Lord with all your heart, and do not learn on your own understanding" Proverbs 3:5.

Secondly, I would like to thank Patsy Spratling-Pampkin for encouraging me to apply to the program and the Admissions committee for accepting me into the program. I would not have made it without the direction and support of my advisor and chair, Dr. Glenda Smith. Thank you for the support, guidance, patience, time, resources, and experience. Without your assistance, I would not have preserved. Thank you to all of my committee members. Dr. Becky Christian who graciously accepted and willing to share her expertise when I asked her to be a part of this dissertation committee and continued to stay on my committee after she left UAB. Dr. Shannon Morrison for her experience, knowledge, and encouragement of the dissertation process. Dr. Loretta Cormier for adding her expertise and knowledge of anthropology to my research. Dr. Pamela Bowen for gracious accepting to be a part of my committee when I needed an additional member, she has added support, knowledge, and her expertise as well. Lastly, at UAB, this would not have been completed without the diligently help of Dr. Jennifer Frank, who agreed to help edit my dissertation and the support of Dr. Karen Heaton.

Most importantly, I would like to thank my family. First, I would like to thank my daughter although she was off at school the first few years. She has provided unconditional love. Not only is she my accountant, housekeeper, and cook; she is an encourager and supporter. Next, I want to thank my next big supporters my mom and sister for their unconditional love, support, and patience. To the rest of my family, my dad, my aunt, cousins, and others I want to thank you for encouragement and love as well.

Finally, I would like to thank my extended family and numerous friends who have supported me, proofread for me, and listened about "Demarcus". This journey has allowed me to bond with some wonderful and talented individuals as part of my cohort. Again, I want to thank my Lord and Savior for this scripture in my last days of dissertation work, "Do not be anxious about anything, but in every situation, by prayer and petition, with thanksgiving, present your request your requests to God, and the peace of God, which transcends all understanding, will guard your hearts and your minds in Christ Jesus" Philippians 4:6-7.

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# LIST OF ABBREVIATIONS

AHA American Heart Association

BMI Body Mass Index

CDC Center for Disease Control and Prevention

FTC Federal Trade Commission

NHANES National Health and Nutrition Examination Survey

#### CHAPTER ONE

# AFRICAN AMERICAN CHILD AND ADOLESCENT OBESITY: THE PARENT'S PERSPECTIVE

# **INTRODUCTION**

Childhood obesity has been acknowledged by Healthy People 2020 as a major health problem throughout the world (U. S. Health and Human Services, 2015).

According to the Center for Disease Control (2017), obesity continues to affect one in six children and adolescents in the United States. Obesity has not spared any age group nor ethnicity; however, African American children and adolescents are among the most obese and are adversely impacted populations (Ogden, Carroll, Kit, & Flegal, 2014; Ogden et al., 2016). Although there have been many weight loss initiatives to combat this health problem, none have demonstrated sustained success across time (Alia et al., 2015; Davis et al., 2013; Neufeld, 2016; Resnicow, Taylor, Baskin, & McCarty et al., 2005).

As a result of ethnicity and living in rural areas of the south known as the Deep South and the Black Belt, African American tend to experience more disproportionate health disparities such as childhood obesity than other races (Li, Robinson, Carter, & Gupta, 2014; Scott, A.J., & Wilson, R.F., 2011). According to the National Survey of Children's Health (NSCH) (2011), Mississippi has the highest (21.7%) incidents of childhood obesity in ages 10-17 years old (Trust for America's Health (TFAH), 2016; Kann et al., 2016; Zhang et al., 2014). According to the 2013 Child and Youth Prevalence of Obesity Surveys (CYPOS), 19.1% of African Americans K-12 were

overweight and 26.7 % are obese versus 17.1% overweight Caucasians and 23.6% obese (Zhang et al., 2014).

Obesity is defined as excess body fat and body mass index (BMI). Body mass index is commonly used to screen for underweight, normal weight, overweight and obese weight status (CDC, 2015). BMI is calculated by dividing the weight in kilograms by the height in meters squared (World Health Organization, 2011). BMI is determined differently for children than adults because of normative growth-related body composition variations (CDC, 2015). Overweight for adults is defined as a BMI within 25.0 and <30; while obesity for adults is defined as a BMI≥30 kg/m²; however, the definition of obesity for children is not as clear (CDC, 2016). The CDC (2015) has defined childhood obesity based on BMI for age and gender; specifically overweight has been defined as a weight within the 85<sup>th</sup> and 95<sup>th</sup> percentile, obesity at or above the 95<sup>th</sup> percentile, and extreme obesity is defined as a BMI at or above 120% percentile for children (CDC, 2015).

## **Problem Statement**

Childhood and adolescent obesity is an epidemic in the United States (CDC, 2016a; Ogden et al., 2016). The incidence of childhood obesity has escalated astronomically in the last thirty years (CDC, 2016a; Ogden et al., 2010). Mississippi has the highest incidence of obesity in children and adolescents, according to the National Survey of Children's Health (NSCH, 2011). In 2011, school-age children and adolescents aged 10-17, ranked number one in the nation with 21.7% being classified as obese (TFAH, 2016). According to the National Health and Nutrition Examination survey (NHANES) 2011-2014, based on sex, age, and race, non-Hispanics blacks aged 2-

19 years of age had a weight prevalence of obesity at 19.5% while their white counterparts were at 14.7% (TFAH, 2016). According to the United States, High School Youth Risk Behavior Survey (YRBS), 2015, 16.8% of non-Hispanic blacks were at least at obese body weight versus 12.4% of the non-Hispanic whites of the same population and 16.4% Hispanics (CDC, 2017; Ogden et al., 2016; TFAH, 2016). As for extreme obesity, non-Hispanic blacks of the same ages were at 8.6% and their white counterparts were at 4.4% (Ogden et al., 2016; TFAH, 2016).

Obese children and adolescents are more likely to continue their body weight status into adulthood and increasing their risk for health problems (Alexander, Alfonso, & Hansen, 2015). Obese African American children and adolescents demonstrate early onset and greater prevalence of diabetes, cardiovascular disease, orthopedic problems, respiratory concerns, along with social problems related to the stigma (CDC, 2016b). The long-term implications for these children are for the early onset of chronic adult diseases and psychological problems that increase the morbidity and mortality, and decrease their quality of life due to their obesity (CDC, 2016b).

The literature has documented studies that there is an association between parents education level and childhood obesity. Children's parents with a low educational level are more apt to have overweight or obese children (Cluss et al., 2013; Silventoinen et al., 2016). Household heads with less than a high school diploma are more apt to have a higher incidence of childhood obesity. In 2015, 14% of African American children, living in MS, lived in a family households that lacked a high school diploma versus 10% of Caucasians (ACEF, 2016).

Minority households in the U. S. are more likely to be impoverished (i. e. AA) in comparison to Caucasians. According to the American Psychological Association (2017), the African American culture is three times more likely to live in poverty versus Caucasians. Previous studies have indicated that household income has an effect on childhood obesity (Robinson & Gupta, 2014; St. George et al., 2013; Wilson & Wilson, 2011). Rogers et al., (2015), confirmed that a low-income was associated with the overweight and obesity status of children especially in African Americans and Hispanics. Approximately 35% of African Americans living in MS are below the poverty line of \$24,250 for a family of four in 2015 (Center for American Progress (CAP), 2016). In 2015, 30 % of children aged 5-17 lived in poverty in MS in 2015 with 47% of them being African American (The Annie E. Casey Foundation (AECF), 2016). Median income for AA households was \$25,900 in 2015 versus Caucasian homes in MS with \$65,300 (ACEF, 2016; U. S. Census Bureau, 2015).

According to the latest statistics and trends, published by the CDC, NSCH, NHANES, and YRBS, obesity in children and adolescent continues to impact the current and future health well-being of all children with a greater percentage of non-Hispanic blacks. The latest NHANES results were for the years 2013-2014 published bi-annual; NSCH was 2011 published every four years; and YRBS was 2015 published bi-annual (TFAH, 2016). Parents and caregivers are the gatekeepers for children and are an important component in instituting change in these statistics.

#### **BACKGROUND**

African American children have the highest incidences of BMI >85<sup>th</sup> percentile (CDC, 2016; Ogden et al., 2016; Skinner, Perrin, & Skelton, 2016) of any ethnicity in the U.S. According to the latest YRBS report (2015), the highest prevalence of overweight status in high schoolers according to gender was 21.2% in AA females, 20.0% in Hispanics, 14.6% in Caucasians; while males were 13.6% in AA; 17.0 in Hispanics and 15.9% in Caucasian with a total of 16.0% of the nation's children being overweight. The same study reported 13.9% of the nation's high school students were obese with highest prevalence seen in African Americans at 16.8%, Hispanics were 16.34% while Caucasians at 12.4%.

According to the 2011-2012 National Health and Nutrition Examination survey (NHANES) childhood obesity increased from a previous survey in 2009-2010 and there were noted differences in obesity prevalence by race and ethnicity. The 2011-2012 survey revealed that 16.9% of children and adolescents are obese with the highest prevalence continuing in non-Hispanic black (20.2%) populations; non-Hispanic whites has the lowest prevalence at 14.1% (Ogden et al., 2014). Adolescent female non-Hispanic Blacks showed the highest prevalence of all age groups in the overweight and obese categories for the 2-19 age range (Ogden, et al., 2014). Racial/ethnic specific trend tests for males and females showed a significantly increasing trend for non-Hispanic black females, translating to an annual increase in the odds of obesity prevalence (Ogden et al., 2014). Non-Hispanic black children and adolescents comprised 24.3% of obese population compared to 21.2% of Hispanics and 14.0% of non-Hispanic whites for 2009-2010 year (Ogden et al., 2012).

There are numerous consequences of childhood obesity. Due to the increase incidence/prevalence of childhood obesity, African Americans are at a greater risk for health disparities. Consequences of child and adolescent obesity is substantial, they include medical and psychosocial comorbidities as well as economic burdens (Lee, 2009; Pulgaron, 2013; Reed, 2013; Stein, Weinberger-Litman, & Latzer, 2014). Obese children and adolescents have greater incidence of social and psychological disorders (i.e. decreased self-esteem, depression, eating disorders) from being teased due to their weight (Pulgaron, 2013; Rankin et al., 2016). Literature continue to show an association between obese children and depression (Rankin et al., 2016; Witherspoon, Latta, Wang & Black, 2013). School age children and adolescent that are overweight or obese have an increased risk of being teased and/or bullied due to their weight than normal weight children (Bell et al., 2011; Suelter et al., 2016). Adolescence is a critical time in a child's life and body dissatisfaction due to increase body weight increases risk of low selfesteem and an unhealthy habit to gain even more weight (Suelter et al., 2016;) Schoolage children and adolescents report low self-esteem, anxiety, and depression (Bjornelv et al., 2011; Phillips et al., 2012). There is an association between attention deficit hyperactivity disorder and overweight children especially when children are not medicated (Kim et al., 2011; Pulgaron, 2013). There is an increased association in overweight or obese females to be thin; this can be from parents and/or peers (Suelter et al., 2016). Children who are overweight and obese have been reported to have significant low emotional health-related quality of life, self-worth, and body dissatisfaction compared with children of normal weight regardless of ethnicity

(Wallander et al., 2013). African American children are at a disadvantage due to being the race with the highest incidences of obesity.

Minority ethnicities are affected by their body weight status at a higher degree than other ethnicities. Medical consequences of child/adolescent obesity with adult illnesses include a multitude of disorders such as cardiovascular disorder (i.e. pediatric hypertension), metabolic disorders (combination of diabetes, hyperlipidemia, and elevated glucose levels), endocrine disorders (i.e. diabetes), respiratory problems (asthma, sleep apnea), and joint problems (Long, Mareno, Shabo, & Wilson, 2012; Pulgaron, 2013; Reed, 2013). Cardiovascular disease risk factors such as hypertension and elevated blood levels (i.e. cholesterol levels) have been shown to be elevated in African American children who are overweight and obese especially in those with a family history of cardiovascular disease (Brogan, Danford, Yeh, & Jen, 2014). A study by Chastang et al., (2017) observed a significant increase in the risk of allergic asthma in children who had had marked increases in BMI. In addition, children who suffer with obesity usually continue well into adulthood with comorbidities, decreased quality of life and increased risk of physical and mental limitations (CDC, 2012; Hendriks et al., 2012; Rabbitt & Coyne, 2012). High levels of BMI were associated with poor health-related quality of life in overweight and obese children; however, AA parents rated their children with lower physical functioning than Caucasians (Black et al., 2014). Due to ethnic differences, African Americans are affected by consequences of obesity at a higher degree than their Caucasian counterparts (Long et al., 2012; Moore & Bailey, 2013).

Furthermore, childhood obesity and its consequences have caused an increase in healthcare cost, as well as an increase in mortality and morbidity (Hendriks et al.; Rabbitt

& Coyne; U. S. Department of Health & Human Services, 2014; Wang, Gortmaker, & Taveras, 2010). Healthcare costs increase as BMI increases which increases healthcare consumption and reduce productivity due to absenteeism relative to normal BMIs (Dee et al., 2014). This figure has been predicted to increase to \$210 billion annually with obesity (Cawley & Meyerhoefer, 2012). According to Finkelstein and others (2014), the lifetime estimate of medical cost of an obese 10-year old child compared to a healthy child was \$19,000 more. By the year 2030, it is estimated that obesity will account for \$48-66 billion dollars in healthcare spending (Brill, 2013). Medical costs related to childhood obesity are estimated to be approximately \$3 billion a year (Trasande & Chatterjee, 2009).

Lifestyle behaviors such as lack of adequate fruit and vegetable intake with high fat diets, physical inactivity, and sedentary lifestyle contribute to a higher risk of obesity and are major causes of morbidity and mortality in the United States today (Tremblay et al., 2011). According to Reed (2013), there appears to be a cultural acceptance in the African American community of some lifestyle behaviors that have contributed to childhood obesity such poor diet and nutrition and inactivity. There are many factors that affect lifestyle behaviors in the African American culture that contribute to their diet and nutrition, physical inactivity, and the increase in sedentary behaviors.

Attributing to childhood obesity is the lack availability and marketing of food, accessibility to different types of healthy foods, increased processed foods, celebratory meals frequently by African Americans, increase portions sizes, and numerous other attributes (Boggiano et al., 2015; de Hoog et al., 2014; Kolahdooz et al., 2016). Most importantly, diet and nutrition habits are started in the home as other lifestyle behaviors

and childhood obesity is the result of the parent's feedings, parental role modeling, child's eating patterns, and parental guidance (Khandpur, Blaine, Fisher, & Davison, 2014; Morrison, Power, Nicklas, & Hughes, 2013). African Americans also tend to consume a great deal of sugar-sweetened beverages attributing to childhood obesity; these include kool-aid, soda's and sport drinks (de Hoog et al., 2014; Kolahdooz et al., 2016). African American children and adolescents living in the south have an increase incidence of childhood obesity; it has been identified that they tend to eat tasty foods, eat past satiety, eat when not hungry and they often binge-eat (Boggiano et al., 2015; Morrison et al., 2013). Access to healthy fruit and vegetables as well as cost are affecting a family's ability to obtain and eat healthy foods (Jones et al., 2014). The community can also present a hindrance to accessing healthy foods for African Americans (Li, Robinson, Carter, & Gupta, 2014).

Physical activity in limited due to the communities and environments where low-income African American live. In some families, safety is a higher priority than physical activity due to the fact that their community may have been neglected, no sidewalks, abandoned building, past and present violence; therefore, they are unable to participate in regular outdoor activity which increases sedentary behaviors (Balvanz et al., 2016; Carroll-Scott et al.,; Li, Robinson, & Gupta, 2014). There are studies being conducted to assist with weight loss that include families such as families improving together weight loss trial for AA adolescents (Alia et al., 2015); school nurse-led programs that delivered interventions for improving diet and activity (Pbert et al., 2013); and feasibility studies conducted in the emergency room for minority children (Haber, Atti, Gerber, & Waseem, 2015) that have produced some positive results in decreasing obesity in children.

According to Tremblay et al. (2011), television watching is the most common measure of sedentary lifestyles resulting in an association between watching television and obesity in school-age children. Studies have shown other associations between sedentary lifestyles among increased risk of metabolic syndrome, cardiovascular disease, self-esteem, social behaviors, and academic achievement (Tremblay et al., 2011). Sedentary lifestyles habits have made a significant impact on increased BMI in children and adolescents.

Additional, parents are the decision makers regarding nutritional intake and physical activities for their household, these decisions affect the child's health and weight status (Perryman, 2011). Cultural factors such as family values, social networks, familial support, food preferences, activity choices, family body weight status, and other sociocultural practices influence a parent's perception of their child's body weight (Gruber & Haldeman, 2009). Therefore, the parents will need to perceive there is a body weight or health issue with their child to initiate positive behavioral changes in their household.

## **SIGNIFICANCE**

Whereas childhood obesity affects many children, a disparate share of the encumbrance falls on the African American population. Previous research findings suggest that African American children with childhood obesity need accessible and efficacious solutions to improve outcomes and reduce the negative impact of the disease. Researchers, healthcare professionals, policymakers, and other stakeholders are uniquely positioned to provide informed clinical and methodological expertise to guide the

appropriate application of childhood obesity research towards improving health outcomes.

However, the parents and/or caregivers have the most impact on children and adolescent obesity. Parents/caregivers outline the direction of lifestyle behaviors, goals, and preferences in their households; therefore, their perceptions and perspectives are critical to redirecting or changing behaviors (Baker & Altman, 2015; O'Neil et al., 2010). The key to understanding family dynamics in one's home include gathering information, observation, and understanding the information from a particular household or family. Uncovering this information and relationships through research can help others understand how the family functions (Berge, Trofholz, Schulte, Conger, & Neumark-Sztainer, 2016). Research has provided knowledge that some parents have difficulty in perceiving their child weight status correctly (Blake et al., 2015; O'Neil et al., 2010). There appears to be a marked difference in healthcare worker's perception of obesity in children and adolescent and the perception of parents/caregivers (Ruggieri & Bass, 2016). Also, the literature states that parents/caregivers are influenced by their cultural background when making a decision on their child's weight status (Ogden et al., 2016; Singh, Siahpush, & Kogan, 2010). Since parental influences as the head of the home and as role models of lifestyle habits to their children, they are most influential in altering lifestyle choices and influences healthier diet and nutrition, decreasing sedentary behaviors, and increasing physical activity when it relates to their household (Turer, Mehta, Durante, Wazni, & Flores, 2016).

The purpose of this study was to understand parental perspectives/perceptions, cultural beliefs, values, behaviors, and factors that contribute to childhood obesity and to

determine potential motivators for changing obesity-related behaviors in African American families residing in Mississippi. An ethnographic approach was used to increase knowledge and understanding of African American families lived experiences and attitudes regarding childhood obesity through the parent's view. These African American parents/caregivers are the only ones that can provide their perspective of lifestyle in their family and home. Findings from this research will aid appropriate personnel in aiding, recognizing, strategizing, and modify existing interventions and programs to better serve the African American population as it relates to the obesity phenomenon.

Qualitative research provides data to researchers about individual's life, their perception of the life they live, and their contribution to that perception or way of life (Merriam, 2009). Exploring the perceptions held by these parents and/or caregivers is crucial to developing and implementing appropriate changes and programs to healthier lifestyle behaviors to ameliorate childhood obesity.

Knowledge in the literature about African American childhood obesity suggest that a reduction of body weight. However, these studies do not show a persistent lifestyle change by African Americans after the intervention or study was completed. No study include the parent's opinion about what they perceive will produce lifelong successful familial behavior changes. This knowledge and understanding will help healthcare providers and all stakeholders assist African American children and their families change their habits from temporary success to a more permanent lifestyle change.

# Parental Perspective

The parent's perspective on childhood obesity is a vital component to understanding lifestyle behaviors in the home. Parents/caregivers establish and enforce practice of household rules. These rules include family routines such as purchasing and preparing foods in the home, deciding whether or not their children actively participate in some sort of physical activity at home or at school, and setting or not setting time limits on screen time devices (i.e. television, computer) (Berge, Trofholz, Schulte, Conger, Neumark-Sztainer, 2016; O'Neil et. al., 2010; Turer, Mehta, Durante, Wazni, & Flores, 2016). Parents/caregivers are also role models for their households. Parents/caregivers are influenced by multiple factors to include but not limited to their health habits, perceptions, culture, family traditions, socioeconomic level, safety, time, and convenience (Alexander, Alfonso, & Hansen, 2015; Blake et. al., 2015; Porter, Shriver, & Ramsay, 2016). It is essential that parents/caregivers understand that their child's body weight status is a health problem in order to alter or modify behaviors (Crossman et al., 2006; He & Evans, 2007; Turer et al., 2016).

# Purpose of the Study

The purpose of this study is two-fold: 1) to understand parental perspectives/perceptions, cultural beliefs, values, behaviors, and factors that contribute to children and adolescent obesity in African Americans living in rural Mississippi; and 2) to determine what would motivate these parents to change.

## SPECIFIC AIMS

The specific aims of this study are:

- To identify the African American parent's perceptions of children and adolescent obesity.
- 2. To identify motivating factors that African American parents of overweight or obese children believe will be appropriate for change to occur.
- 3. To identify African American parent perceived risk factors that contribute to children and adolescent overweight or obese.
- 4. To explore African American parents' perception of how health providers promote healthy lifestyles behaviors.

# RESEARCH QUESTIONS

- 1. What is the African American parent's perception of their child's body weight and current health status?
- 2. What is the African American parent's perception of their child's diet and nutrition, physical activity, and screentime?
- 3. What do the African American parents perceive as the healthcare provider's role in discussing childhood obesity?
- 4. What factors do African American parents believe have most impacted their lifestyle behaviors in relation to their child's weight status?
- 5. What do African Americans parents identify as facilitators to promote changes in lifestyle behavior in their family to prevent obesity?
- 6. What do African American parents believe will motivate them to change their family's lifestyle habits, practices, and beliefs?

# Philosophical Underpinnings

The constructivist paradigm will be used as the foundation for this study. The constructivist paradigm grasps the knowledge that there are numerous ways to convey an individual's understanding and perceptions of reality (Denzin & Lincoln, 2011; Guba & Lincoln, 1985). The goal of this ethnographic approach of qualitative research is to understand how a person or group constructs reality within their context (Denzin & Lincoln, 2011; Guba & Lincoln, 1985). The constructivist paradigm allows the researcher to facilitate, obtain, and present findings of new knowledge from individuals about their reality about a phenomenon. Everyone's interpretation of the reality will be unique to that individual, their beliefs and experiences in the environment in which they reside. These interpretations change based on the situation or contexts being studied.

According to Denzin and Lincoln (2011), "the constructivist paradigm assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and subject create understandings), and a naturalistic (in the natural world) set of methodological procedures" (p. 13). The criteria for evaluating the research include trustworthiness, credibility, transferability, and confirmability. The constructivist paradigm takes a "substantive-formal, standpoint form of theory" and the type of narration for this paradigm includes interpretive case studies and ethnographic fiction (p. 13).

According to Denzin and Lincoln (2011), the methodology of the constructivist paradigm is not only carried out in settings where activities of daily living occur, but the researcher is the tool used to guide and interpret the empirical data using various modalities. The researcher is the person who will collect empirical data (case studies,

personal experiences, cultural texts) using a specified methodology (i.e. interviews, observations, recordings, field notes, focus groups, ethnography), analyze (computer assisted analysis), and interpret one's practices in their natural setting to make a phenomenon more apparent to the world (Denzin & Lincoln, 2011; Guba & Lincoln, 1985). This encompasses a combination of naturalistic approaches and interpretive practices of human life experiences (Denzin & Lincoln, 2011, p. 6). The constructivist paradigm is appropriate for the study of this phenomenon of African American parents' perception/perspective of childhood obesity related to culture, beliefs, values, experiences, and behaviors of African American parents.

# An Ethnography Approach

A study influences by an ethnography approach was used because it describes customs of individuals and their culture. It is the systematic study of people and cultures. It is designed to explore cultural phenomena where the researcher observe society from the point of view of the subject of the study. This study has generated data from the parents of obese African American school-age and adolescents whom recognized that their child had a weight issue to better understand the African American culture and how it relates to childhood obesity in their homes. These parents/caregivers are the only ones that could provide a thick description of their families' everyday life and practice.

## A Constructivist Paradigm

Basic beliefs and assumptions of the constructivist paradigm include a relativist ontology, a subjectivist epistemology, and a naturalistic methodology (Denzin & Lincoln, 2011). Ontology refers to relativism-local and specific co-constructed realities (Lincoln,

Lynham, & Guba, 2011, p. 100). According to Guba & Lincoln (1985, p. 84), constructed realities refer to the connotations and comprehensiveness believed to come from a noticeable phenomenon in order to compose a belief structure.

Epistemology refers to development of transactional/subjectivist relationships that are created (Lincoln, Lynham, & Guba, 2011, p. 100). There should be an understanding between the researcher and the participants' perception on the phenomenon being studied. According to Guba and Lincoln (1985), individuals create their meaning and understanding of reality from their environment. The researcher in this study will collect data from participants based on their perspectives of their belief systems, values, experiences, behavior, and the interaction of family within the confines of their environment and culture (the milieu within which they live and interact). The findings will be an evaluation of joint communication and interaction between the participants and the researcher.

Researchers must use various strategies to elicit individualized participant's experiences and views to be able to infer the cultural and behavioral patterns of a phenomenon as it is reported by those being studied (Guba & Lincoln, 1985, p. 334). The knower and the respondent, being the researcher and the group participants co-create an understanding (Denzin and Lincoln, 2011, p. 13). Methodology refers to the hermeneutical/dialectical process of seeking new knowledge (Guba & Lincoln, 1985, p. 195). The researcher must have a documented plan of action of how the data from a qualitative research study will be obtained, analyzed, and evaluated. The researcher of this study on childhood obesity has a detailed plan of action for collecting data through

interviewing, observation, field notes, and interaction with focus group participants as well as data analysis.

The constructivist paradigm has positions on selected practical issues such as inquiry aim, nature of knowledge, knowledge of accumulation, goodness or quality criteria, values, ethics, voice, training, inquirer posture, accommodation, and hegemony that will be discussed (Lincoln, Lynham, & Guba, 2011, p. 99). Some of the issues that paradigms addressed are considered to be critical, they are axiology, accommodation and commensurability, action, control, relationships to foundations of truth and knowledge, extended considerations of validity, and voice, reflective, and postmodern textural representations (Lincoln, Lynham, & Guba, 2011).

Inquiry aim is the understanding and interpretation of the inquiry being studied through reconstruction of the life experiences from a participant's perspective (Lincoln, Lynham, & Guba, 2011, p. 106). Nature of knowledge is "individual or collective reconstructions coalescing sometimes around consensus" (p. 101). This is where researchers recognize and visualize knowledge obtained through inquiry from cognitively and socially constructed individuals (p. 107). The participant's perception is their viewpoint of actions, behaviors, and life experience as they visualized them.

Knowledge accumulation involves "more informed and sophisticated reconstructions; vicarious experiences" (Lincoln, Lynham, & Guba, 2011, p. 101). This is where the researcher inquiries about how the current knowledge from empirical data will build on prior knowledge creating a better understanding (108). According to Guba and Lincoln (2005), relationships to foundations of truth and knowledge in this paradigm, are "antifoundational" (p. 198). Anti or non-foundationalism refers to approaching the

empirical and interpretive findings of the inquiry as perceived by others (Lincoln, Lynham, & Guba, 2011, p. 114). The researcher will add new knowledge obtained from analysis of the data collected from the parent's perspective of the phenomenon of childhood obesity in the African American population to the previous research and gaps noted in the literature review.

Goodness or quality criteria use "trustworthiness and authenticity" as indicators of rigor of a study (p. 101). The criteria are judged based on "credibility, transferability, dependability, and confirmability" (p. 108). Extended considerations of validity are the combination of "ethics and epistemology" (p. 114). The acceptance of data collected through various modalities such as interviewing and observation as being valid data, based on that individual's perspective and the researcher interpretation of that data in a naturalistic setting (pp. 114-115).

Axiology refers to the "ethics and values" of the inquiry process (Denzin & Lincoln, 2011, p. 91). Researchers want to ensure that the knowledge gained through the inquiry process follow guidelines so that their description of reality constructs are presented in an ethically and valuable context (p. 111). The researcher must ensure that values are included and formative as a part of the research process (Lincoln, Lynham, & Guba, 2011, p. 101). Ethics are an intrinsic part of the inquiry process that tilts toward revelation and includes special problems (p. 101; p. 109). Ethics and values help authenticate a researcher's study.

The voice of a study refers to the "passionate participant" as the facilitator of multi-voice reconstruction (p. 99). Researchers use the constructivist paradigm to increase previous knowledge by interpreting the participant's perception and voice

interaction (p. 110). Voice, reflective, and postmodern textural representations can be interpreted as one voice or many voices ("single vs. multi-voiced") (Denzin & Lincoln, 2011, p. 91). According to Lincoln, Lynham, and Guba (2011), voice can be the researcher, participant, and/or the interpreter; reflexibility can be voice of self in the researcher; and postmodern textural representations can be the scientific method used by researchers to explain the humanistic aspect of their writing so that there is no hidden meaning.

Training refers to the preparation of the researcher and includes the "resocialization: qualitative and quantitative; values of altruism, empowerment and liberation" (p. 101). Inquirer posture is the approach the researcher will use to facilitate the inquiry of the experiences lived by the participant (p. 110). Action is "what the researcher does in the world" (Denzin & Lincoln, 2011, p. 91)? Action addresses what's done with the new knowledge once it's validated and made visible to the world (Lincoln, Lynham, & Guba, 2011, p. 113). Control answers "who initiates inquiry, who asks questions" (Denzin & Lincoln, 2011, p. 91)? This responsibility is a joint effort among the researcher and the study participants (Lincoln, Lynham, & Guba, 2011, p. 113).

Accommodation and commensurability addresses the question "can paradigms be fitted into one another" (Denzin & Lincoln, 2011, p. 91). Accommodation refers to being "commensurable with critical and participatory inquiry" but "incommensurable with positivism and postpositivism" (p. 111). According to Lincoln, Lynham, and Guba, (2011), some paradigms are commensurable with others but positivistic forms are incommensurable (p. 112).

Hegemony refers to the research itself, does it "seek recognition and input; offering challenges to predecessor paradigms, aligned with postcolonial aspirations" (p. 99). In other words, hegemony is about power relationships between the researcher and the participants. The researcher used the constructivist paradigm to study the meaning of childhood obesity within a subculture but can't be blinded by the hegemony perspective.

Adopting a constructivist perspective makes the exploration of cultural components of childhood obesity possible by considering different modalities of obtaining new knowledge. This philosophical paradigm is appropriate for studies related to culture. New knowledge is obtained by a combination of knowledge and skills of the researcher and an appropriate collection of data from participants that encompass the cognitive, emotional, behavior and environmental dimensions of that individual (Garneau & Pepin, 2014). This provides a framework for social and cognitive constructs to be developed by exploration of values, beliefs, traditions, and experiences within a culture on the phenomenon of childhood obesity.

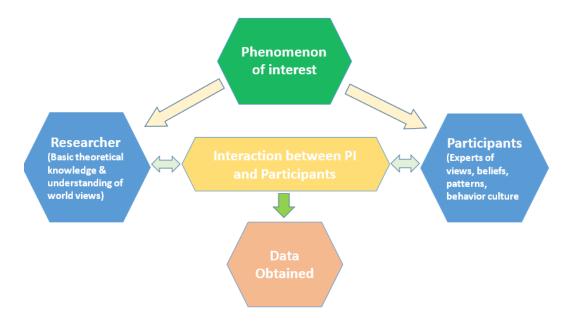


Figure 1 Constructivist *Paradigm* 

The constructivist paradigm (Figure 1) was used as a framework to study the phenomenon of childhood obesity in African Americans. The researcher is the one that understands basic theoretical knowledge and viewpoint of the world. Researchers learn from participants who are the experts of their reality and how a phenomenon relates to them. The researcher and the participants must have some sort of interaction so that the participants can communicate their realities, beliefs, principles, habits, and experiences of their specific group in their natural setting. The researcher acts as the human instrument within the study. The participants provide the insider approach and the concepts while the ideas being studied by the researcher is the outsider approach. This paradigm includes a naturalistic inquiry that should be stimulated through experience, interest, and knowledge of the researcher.

### **Definitions of Terms**

African American an American of black African descent and/or identifies themselves as African American (Merriam-Webster, 2015).

Body Mass Index-calculated by dividing weight in kilogram by the square of height in meters (weight in kg / (height in m/100)<sup>2</sup> (CDC, 2012).

Culture – the learned values, beliefs, traditions, behaviors, practices, and customs of a specific group of individuals (Merriam-Webster, 2015).

Obesity – BMI at or over the 95<sup>th</sup> percentile for children and adolescents of the same age and sex (CDC, 2012).

Overweight – BMI at or above the 85<sup>th</sup> percentile for children and adolescents of the same age and sex (CDC, 2012).

Parent/caregiver – the caregiver responsible for providing care, food, and clothing for at least one overweight or obese school-age child (Merriam-Webster, 2015).

Perception – the way one thinks about or understands someone or something (Merriam-Webster, 2015).

### ASSUMPTIONS AND LIMITATIONS

The researcher assumes that respondents will answer truthfully and the focused questions will provide meaningful information on parental perceptions of childhood obesity and what they feel will help facilitate and motivate change in the African American family toward reducing childhood obesity. Limitations of this study will be that it is qualitative, limited interviews, and not generalizable to all African American parents with overweight or obese school-age and adolescent children.

#### CHAPTER TWO

### LITERATURE REVIEW

The purpose of this chapter is to review literature related to African American culture and childhood obesity. This chapter will include a synthesis of the literature on the epidemiology of childhood obesity, African American culture, the parent/caregiver, family dynamics, barriers, the state of Mississippi, and other influences on childhood obesity. The culture includes the traditions and habits of the African American population. The parent/caregiver's perceptions and perspectives include factors that influence the parent's viewpoint and their decisions. The family dynamic section includes genetics, BMI, and parenting styles. Barriers include research on time constraints, socioeconomic status, communication between healthcare providers and parents, and the environment. The section on Mississippi includes information about the state and its high incidence of African American childhood obesity. Finally, the literature review concludes with information about stakeholders, faith-based facilities, and policymakers.

Search strategy included Pubmed, CINAHL, and google scholar databases.

Search terms and quotes included African American and childhood obesity which yielded approximately 600 articles; blacks and childhood obesity yielded approximately 500 articles. A search of terms African American, childhood obesity and parental perception yielded less than twenty articles; African American, childhood obesity and perspectives yielded less than ten articles; African American, childhood obesity, and culture yielded

over 250 articles; and only seven articles used the terms African American, childhood obesity and culture. A search of African American childhood obesity and motivation yielded another twelve articles. A number of articles were derived from reference lists referenced in previously obtained researched articles. Other researched articles were retrieved from searched terms such as African American childhood obesity and lifestyle behavior utilizing terms such as healthcare providers, diet and nutrition, physical activity, and screen time activities. Other articles were found by website references such as those from the CDC. Abstracts were then read and evaluated for relevance to African American parents and obesity, African American school-age children and obesity, the African American culture as it related to any aspect of childhood obesity, barriers in the AA family, treatment of childhood obesity that included AA children and/or parent, data (statistics) regarding prevalence and incidences, etc. Some articles about childhood obesity, parental perception, parental perspectives, and communication about other ethnicities was also used to show differences in health disparities compared to other race/ethnicities. Approximately 215 articles were reviewed.

# Epidemiology

Race/ethnicity appears to be a major contributing factor in high incidences of childhood obesity as seen in minority populations including African Americans (Ogden et al., 2010, 2012, 2014). According to Kumanyika (2008), ethnicity is associated with differences that include cultural influences which are a contributor to the higher than average risk of obesity among children in ethnic minority populations in the US. The 2011-2014 NHANES reports 19.5% of non-Hispanic blacks are at or above the 95<sup>th</sup>

percentile (obese) while non-Hispanic whites are at 14.7% (Ogden et al., 2016). These results show an increase from the NHANES 2011-2012 survey report where 20.2% of non-Hispanic black children and adolescents aged 2 to 19 were at or above the 95<sup>th</sup> percentile and non-Hispanic white children and adolescents aged 2 to 19 were at 14.1% (Ogden et al., 2014). According to Ogden et al., (2014), approximately 40% of African American children aged 12-19 are obese with female youth showing a higher prevalence of obesity than male youth.

African American youth have been found to have a higher proportion of body fat than their Caucasian counterparts (Baxter, Guinn, Tebbs, and Royer, 2013; Biro, Huang, Morrison, Horn & Daniels, 2010; Zhang et al., 2014). In a study by Cunningham and others (2014), non-Hispanic black, third graders had a higher prevalence of obesity than their Caucasian counterparts. African American children experienced larger increases in BMI and higher incidences of obesity than Caucasian children; thus, indicating ethnicity as a major contributing factor (Freedman et al., 2006; Cunningham, Kramer, & Narayan, 2014).

Baxter, Guinn, Tebbs, and Royer (2013) reported that 49% of 1500 African American fourth-graders studied were either overweight or obese. In a study of Hispanic, African American and Caucasian children, Rendall, Weden, Fernandes, and Vaynman (2012) found that 25.1% of the Hispanic and African American children were estimated to be obese by eighth grade compared to 17.4% of Caucasians. According to Allen et al., (2016) found the risk of being overweight relative to normal was 1.64 (95% CI 1.06 to 2.66) and for being obese was 2.55 (95% CI, 1.65 to 3.94) African American adolescents with female having 82% higher odds of being overweight.

Researchers have found that the increasing prevalence of childhood obesity has led to children and adolescent with increased BMI levels acquiring chronic adult diseases (Choudhary, Donnelly, Racadio, & Strife, 2007). Adolescent obesity has created comorbidities, including metabolic syndrome (Biro & Wien, 2010) and pediatric hypertension (Davis et al., 2012; Huffman, Kanikireddy, and Patel, 2010). There is also an increased risk of cancers, cardiovascular diseases, respiratory diseases, orthopedic problems, psychological and numerous other consequences which can occur as a result of obesity in school-age children and adolescents (Biro & Wien, 2010; Lee, 2009; Young-Hyman et al., 2006). Obesity in children and adolescents can be linked to multiple adult disease and can result in decreased life expectancy and increase healthcare costs (Moore & Bailey, 2013; Trogdon, Finkelstein, Feagan, & Cohen, 2012). Overweight and obese children and adolescents are more prone to becoming obese adults, increasing both morbidity and mortality rates (Alexander, Alfonso, & Hansen, 2015).

As noted above, African Americans have a significantly higher prevalence of childhood obesity than Caucasian Americans. Data has repeatedly shown that this trend has continued to be an issue in the African American population in the United States (Ogden et al., 2012; 2014; 2016). Therefore, interventions and treatments should include investigating the link between this population's unique ethnicity and the health disparities regarding childhood obesity.

### African American Culture

*Traditions*. African American parents and caregivers are highly influenced by their culture when it comes to their perception of weight (Pena, Dixon, & Taveras, 2012). Their culture present many challenges when it comes to childhood obesity due to diverse

ethnic beliefs and unique practices. These challenges included genetics, lifestyle behaviors, environmental issues and other issues (Crossman, Sullivan, & Benin, 2006; Booth, King, Pagnini, Wilkenfeld, & Booth, 2008; Carroll-Scott et al., 2013; Hudson, 2008). Practices and beliefs related to cultural practices reported for African Americans include: ethnic food choices, preparation, and/or beliefs (Boyington et al., 2008; Chen & Wang, 2011; Lewis-Moss, Paschal, Redmond, Green, & Carmack, 2008), body-size preferences (Doolen et al., 2009; Long, Mareno, Shabo, & Wilson, 2012), and sedentary behaviors (Adkins et al., 2004; Long et al., 2012) which contribute to obesity.

African Americans have traditional foods in their homes on a regular basis; these foods are considered their ethnic foods. African Americans tend to believe that they need certain foods in their diet on a regular basis such as soul food or fried chicken on Sundays (Alia et al., 2015). An example of other African American traditions includes having children eat everything on their plate or clean plate, large portion sizes, and large meals through the week and on Sundays (Alia et al., 2015; Harrison et al., 2011; Palmberg et al., 2014). Some African American parents note that family traditions always involve food in some form and there is always something to celebrate or a community function (Alia et al., 2015; Harrison et al., 2011). An example of a large meal traditionally served in African Americans' home includes foods such as fried chicken, turkey with stuffing, potato salad, macaroni and cheese, string beans, greens and deserts such as coconut pie and homemade cakes (Palmberg et al., 2014).

African American customarily prepare foods with high fat content and consume foods with high levels of fats and salts such as meats due to taste preferences (Tremblay et al., 2011; Van Horn et al., 2011; Vollmer & Mobley, 2013). According to literature,

African Americans tent to eat more red and processed meats than other ethnic groups (de Hoog, Kleinman, Gillman, Vrijkotte, Eijsden, & Taveras, 2014; Kolahdooz et al., 2016). African Americans also tend to graze more, eat when not hungry, and consume larger portions sizes of foods prepared with high fat food concentration than their Caucasian counterparts (Conlon et al., 2015; Mooreville et al., 2015: Vollmer & Mobley, 2013). African American parents/caregivers tend to prefer highly palatable foods and foods that appease their children's taste buds contributing to overeating. African American adolescents tend to believe that healthy foods taste bad and they are not often available, therefore, their preference is for the unhealthy foods they prefer (Reed, 2013).

African Americans also tend to consume more calories from sugar-sweetened beverages such as Kool-Aid and fast foods than their Caucasian counterparts (Wang, Bleich, & Gortmaker, 2008; Shearrer et al., 2016; Taveras, Gillman, Kleiman, Rich-Edwards, & Rifas-Shinman, 2013). There appears to be a cultural acceptance of unhealthy behaviors such as poor nutrition and physical inactivity in African Americans (Reed, 2013). Li, Robinson, and Gupta (2014), found positive associations between convenience stores which seldom carry healthy foods in African Americans communities and a high risk of obesity when families frequent the stores.

African Americans view body size differently from other ethnic groups. They tend to have a different viewpoint of their body weight, body image, healthy and unhealthy weight than other ethnic groups (Enten & Golan, 2008; Pena, Dixon, & Taveras, 2012). Cultural acceptance of a larger body size contributes to a lack of parental recognition of a health risk based on their child's body weight status (Doolen et al., 2009). Some African American parents believe a larger body size means a healthier child

(Dhoble et al., 2007; Harrison et al., 2011Killion, Hughes, Wendt, Pease, & Nicklas, 2006; Kirby, Liang, Chen, & Wang, 2012).

The African American population and its adolescents are concerned with the social stigma attached to their weight in a society fixated on appearance, but fail to recognize the risk for health problems (Crossman et al., 2006: Granberg, Simons, & Simons, 2009). It is difficult for African Americans parents to identify their child as overweight or obese when the family is composed of overweight or obese family members (Carcone et al., 2011; Reed et al., 2013; Snethen et al., 2008). Therefore, some in the African American population view obesity as the norm rather than a potential health risk issue.

While Burnet et al. (2007) found that African Americans parents believe that smaller frames looked unhealthy and that overweight was not recognized until a diagnosis of a chronic illness such as high blood pressure. Burnet et al., (2007) suggested that the difference in perceptions of childhood obesity may be related to cultural variations in the way African Americans define obesity. African American parents tend to reject the use of standardized charts; they typically use functional terms such as "thick" or "big boned" when discussing size of their children (Boyington et al., 2008; Burnet et al., 2007).

Granberg, Simons and Simons (2009) assessed the association between body size and social self-image among a group of African American female adolescents. Analysis revealed that there is a stigma attached to being overweight or obese in this group. They hypothesized that African American females used physical accessibility and racial socialization of other African Americans to counter this stigma and help draw positive

conclusions about their body weight and appearance. As a result, African American female adolescents tended to compare themselves to other African American women who represented a larger body sizes as compared to other ethnic groups; therefore, the adolescents perceived this as a positive body image. This study found that racial socialization and the percent of African Americans in a neighborhood were positively related to body size of 14 and 15-year old youth. The social class status of the family was significantly positive associated with body size.

Pena, Dixon, and Taveras (2012) referenced many sedentary behaviors that contribute to obesity in minority youth (i.e. African Americans) such as excessive television watching, access to televisions in the bedroom, and a lack of physical activity. The CDC (2009) noted that some of the reasons for higher obesity prevalence in African Americans were lack of regular physical activity, differences in their views and sociocultural norms regarding body size, and inaccessibility to supermarkets with fresh fruits and vegetables.

In addition to ethnicity, gender also appears to be a factor in high BMI.

According to current research, both African Americans girls and boys have seen an increase in BMI with girls having the higher incidence (AHA, 2010; Ogden, 2014).

Delva, Johnson, and O'Malley (2007) found that minority male youth are more likely to have a BMI at or above the 85<sup>th</sup> percentile. However, in contrast, there have been other studies have shown that African American girls have higher incidences of obesity (Kolahdooz et al., 2016; Reed, 2013). Adkins, Sherwood, Story, and Davis (2004) found an increase in tendency for African American females who became obese as children to remain overweight as adults. It is further estimated that 80% of African American

women are obese (Ogden et al., 2014). According to Haff (2009), African American females (15.1%) were more apt to try to gain weight than their Caucasian (3.7%) female counterparts.

Another pattern seen in African Americans is that they tend to eat when they are not hungry. There is literature (Boggiano, Wenger, Mrug, Burgess, Morgan, 2015; Tanofsky-Kraff et al., 2008) suggesting that African Americans eat for reasons other than hunger such as emotions, social pressures, or just trying to fit in. African Americans have also been found to have higher incidence of binge eating (Boggiano et al., 2015).

Parents are the influential change agents over the diet and exercise of school-age children and adolescents; therefore, their role is vital to the developmental process of recognition, intervention, and treatment (Ball et al., 2012; Etelson et al., 2003; Hackie & Bowles, 2007; O'Neil et al., 2010; Rhee, DeLago, Arscott-Mills, Mehta, & Davis 2005). Parents have a profound influence on children by promoting values and attitudes, rewarding or reinforcing specific behaviors, and by serving as role models. Eating habits and exercise patterns are established by parents during early childhood (Boyington et al., 2008; Reed, Dancy, Holm, Wilbur, & Fogg, 2013; Taveras, Gillman, Kleinman, Rich-Edwards, & Rifas-Shiman, 2010). There is a relationship between mothers and their children's eating habits because they children usually mimic or role-model their parental behavior (Morrison, Power, Nicklas, & Hughes, 2013). Taveras and others (2010) state that racial and ethnic disparities related to obesity are present by the time a child reaches preschool age. A combination of parental beliefs in feeding and rearing styles, influence the parents' decisions when purchasing and preparing foods eaten in the home,

monitoring activities including sports, electronic games and television, and attending to the health care needs of their children (Boyington et al., 2008; Etelson et al., 2003).

In summary, African Americans have their own traditions and habits including eating cultural foods. They have a tradition of serving large meals on Sundays and including food at every celebratory event. Not only do they have set cultural traditions related to food but also racial/ethnic cultural norms related to body size. Perceived body size norms are a risk factor for childhood obesity especially in the African American female population. The unhealthy traditions and habits of ethnic cooking, sweetened drinks, limited physical activity, and increased television watching combined with the addition of familial and societal norms have all contributed to this crisis in the African American community. The literature has consistently mentioned that African American obesity is positively associated with ethnicity and its unique culture.

# African American Parent/Caregiver

Parental Perception. Numerous papers describe the African American parents' tendency to misinterpret their child's body weight as normal rather than overweight or obese (Ruggieri & Bass, 2016; Blake et al., 2016; O'Neil et al., 2010). Parents may only become aware of a body weight issue when their child reaches a size that the parent perceives as obese (Killion et al., 2006; Young-Hyman et al., 2000), the child's health becomes an issue (Hackie & Bowles, 2007), or the child is unable to perform normal physical activities (Eckstein, Mikhail, Ariza, Thomson, Millard, & Binns, 2006).

Previous studies of parent-child dyads provide evidence that parents significantly affect their child's obesity status; however, these parents did not recognize their child's body

weight as overweight or obese (Etelson et al., 2003; Adkins et al, 2004; Killion et al., 2006). Eckstein and others (2006) found no significant differences in parental perceptions between ethnic groups of African Americans, Caucasians, Hispanics and others; however, their findings were disturbing as African Americans tend to have the most serious health problems related to obesity and its comorbidities.

African American parents, as a result of misperceiving their child's weight status, have failed to address the potential serious health issues, increased health care costs, and decreased quality of life associated with obesity (Crossman et al., 2006; He & Evans, 2007; Killion et al., 2006). According to Dammann, Smith, and Richards (2011), most parents misperceive that their child's or even their own weight is not a health issue because others in their social arena (i.e. family, peers) have a similar culturally accepted body habitus (Dammann, Smith, & Richards 2011).

The roles and attitudes of healthcare providers impact relationships between the providers and the African American parents. Evidence suggests that African American parents trust the advice of pediatricians and other health care providers regarding their child's health risks. Understand and acknowledging and understanding the attitudes and perceptions of parents by healthcare providers are important steps in establishing healthier lifestyle behaviors to decrease childhood obesity (Francis, Ventura, Marini, & Birch, 2007; Hudson, 2008). A priority in promoting a healthy lifestyle and a healthy body weight for children is parental recognition that childhood obesity is a health issue with health risks that can lead to morbidity and mortality (Dammann, Smith, & Richards 2011; Neumark-Sztainer, Wall, Story & van den Berg, 2008).

Boyington et al., (2008) posited that once African American parents are able to identify that their child's body weight is above the 85<sup>th</sup> percentile (overweight status) and evaluate their role, they will be able to contribute and be an active participant in assisting their child in changing lifestyle behaviors to maintain a normal body weight. As long as parents are unable to judge body weight accurately and do not realize that their child is overweight, they are not willing to make healthier choices or promote healthy behaviors as a priority (Eckstein et al., 2006; Genovesi et al., 2005; Murphy & Polivka, 2007). Healthcare workers find difficulty in implementing programs targeting obese children when parents fail to acknowledge the condition or risks posed to the child's health (Hackie & Bowles, 2007; West et al., 2008). Ball and others (2012) recruited 90 parent-child dyads with 8-12 year olds to participate in a parent as change agent weight management randomized clinical trial of an intervention for childhood weight management. This trial revealed that role modeling of positive attitudes and lifestyle behaviors by parents could be replicated by their children (Ball et al., 2012).

Parents and caregivers are the most essential component in promoting healthy lifestyle behaviors, but there is a dearth of research about how parents of diverse ethnicities prefer to engage themselves and their families in these activities. Cowgill and others (2014) revealed that parents of racial/ethnic minority groups including African American, Hispanic, and Caucasian youth wanted to engage in health promotion activities as a family but were more focused on being seen as good parents in the view of their child. Another study explored factors that affected family therapy treatment as well as the attrition of African Americans participants and found that family members must

have buy-in for retention and success of weight loss interventions to be successful (Carcone, MacDonell, Naar-King, Ellis, Cunningham, & Kaljee, 2011).

In a study by Booth and others (2009) parents identified different criteria that they would use to judge overweight or obesity in their children; these included physical appearance, limited physical performance, child embarrassment related to body size, poor self-esteem and large clothing size relative to age. This research on what would make it easier for parents to help their children eat healthier foods and be more active yielded four categories: increased opportunities for physical activity, easier access to healthy foods, restricted marketing to children, and education for parents and children (Booth et al., 2009). The study concluded that parents were concerned about their children's weight but reluctant to take appropriate action to correct the behavior (Booth et al., 2009). In a qualitative study, Davis et al. (2008) identified eight themes regarding attitudes concerning childhood obesity in rural areas. This study included barriers that parents face and addressed available weight loss programs for children. Themes included the parents' belief that overweight children were lazy, concern about their children's weight and health, and the belief that because of genetics children's weight will decrease in time (Davis, James, Curtis, Felts, and Daley, 2008). Other themes were lack of resources, failed attempts at reducing weight, cost of healthier foods, and peer pressure (Davis, James, Curtis, Felts, and Daley, 2008).

Few studies target African American adolescents and those that have did not produced significant results because of the inability to retain participants (Carcone, MacDonell, Naar-King, Ellis, Cunningham, & Kaljee, 2011). Other reasons given for African American attrition included fear of cultural insensitivity and misunderstandings

from clinicians (Carcone et al., 2011; Dolinsky, Armstrong, & Ostbye, 2012). Studies that have included African American and high attrition have found issues related to attrition were: life stressors and problems, conflicting schedules, lack of transportation, child care, worldview, and collaboration and reinforcement of therapy (Grow et al., 2013; Kelleher et al., 2017; Williams et al., 2010). Contrary to the history of low attritions, there are a few studies with successful attritions (Bean et al., 2015; Stockton, McClanahan, Lanctot, Klesges, & Beech, 2012). There is also a lack of qualitative studies with minority participants that examine the experiences of African American children or families while in obesity-prevention program. Research has many challenges regarding attrition of African American participants. There is a need for more research with African American participants, however, efforts will need to include culturally sensitive strategies for recruiting and maintaining attrition.

Parental Perspectives. The American College of Pediatricians (2013) has documented the roles and responsibilities of parents. A parent can be biological, adopted, state-appointed guardian, or a custodial grandparent. Parents are responsible for foundational support, nurturing, and rearing of the child. The parent's role encompasses directing the child's rearing and the legal authority to make decisions for their child including their education, religious beliefs, and healthcare decisions. The United States Supreme Court has viewed the parent as the family member who provides values, morals, and cultural beliefs to their children.

Research has shown that there are many reasons that parents may misperceive their children's body weight status (Boyington et al., 2008; Dammann, Smith, & Richards 2011; Killon et al., 2006). However, if obesity runs in the family or the majority of

family members are obese then the parents of overweight or obese children do not perceive their child's body weight as a risk (Almoosawi et al., 2016; He & Evans, 2007; Reed, et al., 2013). Therefore, the parent does not recognize the need for a change habits or behaviors.

Parental perceptions and perspectives of their child's body weight are a critical element in understanding, preventing, and treating childhood obesity (AHA, 2010; Doolen, Alpert, & Miller, 2009; Watkins, Clark, Foster, Welch, & Kasa-Vubu, 2007). Fathers, if present, are also involved in the decision-making processes, lifestyle behaviors, and their children's health status; however, African American fathers tend to misjudge their child's body weight just as mothers do (Lowenstein et al., 2013; Snethen et al., 2008). In addition to parents, extended families often play a major role in African American households and tend to influence parenting beliefs and practices (Pena, Dixon, & Tayeras, 2012).

Parents are the role models for lifestyle behaviors that have been found to contribute to body weight status and thus, childhood obesity especially in the African American households where the prevalence of obesity is high (Lindsay, Sussner, Kim & Gortmaker, 2006; Pinnard et al., 2012). Parents are the influential role models of the development of lifestyle habits and behaviors in their home for their children (Ball et al., 2012; O'Neil et al., 2010). Research supports that parents are critical influences their child's behavior since the child tend to model what they have seen in the home (Moore & Bailey, 2013; Moore, Harris & Bradlyn, 2012). Mothers are considered the gatekeepers of food and the eating experiences of their family (Vollmer & Mobley, 2013). However, Lowenstein et al. (2013) suggested that the father's perception and role in influencing the

family is as important as the mother's role in developing family-based interventions to combat childhood obesity.

The cultural beliefs and traditions of parents are influential in lifestyle behaviors and habits that they use to rear their children (Boyington et al., 2008). The methods that parents use to rear their children and run their households are influenced by multiple cultural, environmental, behavioral, and social factors (Hudson, 2008; Moore & Bailey, 2013). Only the parents can provide their perspective/perception on their behaviors and practice used in their household (Golan, 2006; Pena, Dixon, & Taveras, 2012). Parents have the knowledge of their household's nutrition, food selections, and eating patterns; they select healthy or unhealthy food/beverage choices (Chen & Wang, 2011; Clark, Goyder, Bissell, Blank & Peters, 2007; Khandpur, Blaine, Fisher, & Davison, 2014; Lindsay, Sussner, Kim & Gortmaker, 2006).

Parents acquire, cook, and provide the foods/snacks/beverages for their homes, display physical activity or exercise behaviors, and demonstrate sedentary behaviors such as television watching, computer and game usage. Dietary and physical activity habits are usually formed early in a child's life and usually continue into adolescence and adulthood (Ehrenthal et al., 2013; Moore & Bailey, 2013; Pena, Dixon, & Taveras, 2012). Parents and monitor the extracurricular activities of their children such as soccer, football, swimming, etc. and set the limits or allow unlimited times on television watching, computer use, and electronic games (Alexander, Alfonso, & Hansen, 2015; Mathews et al., 2008; Volmer & Mobley, 2013).

Children are dependent on their parents and caregivers for the atmosphere of the home environment as well as for scheduling activities of daily living including diet and nutrition, physical activities, and sedentary behaviors (Faith et al., 2012). Parents and caregivers, ordinarily mothers, control the foods that are in the household, purchases, preparation, preferences, meal times, and places where outside meals will be eaten by the family; which reinforces their position as a major contributor of dietary practices (Lim, Zollner, Ajrouch, & Ismail, 2011; Reed, 2013; Vollmer & Mobley, 2013). Research has indicated an association between parental dietary habits and those of their children (Boyington, et al., 2008; Golan & Crow, 2004; Sealy, 2010a). The home milieu is the most important setting that shapes eating patterns of family and child (Enten & Golan, 2008; Khandpur, Blaine, Fisher, & Davison, 2014; McFatrich, et al., 2013; Reed, 2013).

Parents are ultimately responsible for making decisions on whether to alter behaviors in their household (Ball et al., 2012; Faith et al., 2012)). As change agents; they foster the contextual environment including the feeding styles, and parenting styles of their children; their relationship within the family and positivity can nurture positive health changes in perceptions and lifestyle behaviors (Ball et al., 2012; Golan & Crow, 2004; Rhee, DeLago, Arscott-Mills, Mehta, & Davis 2005; Vollmer & Mobley, 2013). The parents of overweight or obese children are the person(s) that can express influences, challenges, and motivating factors to promote change in their households.

It is suggested by Hubbs-Tait, Kennedy, Page, Topham, & Harrist (2008) that treatment modalities of childhood obesity involve the entire family. Increased parental participation in diet and exercise programs have shown positive outcomes when it comes to increasing healthy lifestyle behaviors (AHA, 2010). Lacking in the literature is the motivator for African American parents to engage and practice healthy lifestyle behaviors on a daily basis. A participant in a focus group conducted by Cowgill and colleagues

(2014), suggested that children model or imitate their parents' behavior; for example, if parents eat unhealthy foods, the children will also. This was motivation for families to confront obesity.

The parental perspective and perception are vital to exploring childhood obesity in the African American population. Parents are responsible legally for their child(ren); this includes the rearing, education, healthcare, and the instilment of values, morals, lifestyle behaviors, cultural beliefs, and traditions. Therefore, parents as well as extended family are the decision-makers, role-models, and the change agents for their children. It is important that the parents recognize problems including the health issue of childhood obesity to intervene. It is the parents that will ultimately make the decision for change for their family. The parent's perspective in childhood obesity, including the initial recognition that a child is overweight, the understanding that excess weight is unhealthy, and the decision to intervene, is lacking in the literature. Information about parental perspectives on their child's obesity were obtained from the parents themselves is the focus of this dissertation.

### FAMILY DYNAMICS

Family Dynamics. There is a body of literature that recognizes the need to understand the significance of family dynamics, and its relationship to lifestyle behaviors (i.e. diet, activity, screen time) on childhood obesity, especially in the African American population (Nsiah-Kumi, Ariza, Mikhail, Feinglass, & Binns, 2009; O'Neil et al., 2010; Payas et al., 2010). Many intra-familial factors are responsible for obesity in African Americans. Parents and grandparents tend to bribe children to eat, and do not realize that

they are enforcing negative behaviors and contributing to the high incidence of obesity in this group of children (Dhoble et al., 2007; McGarvey et al., 2006). A focus group study revealed that parents of African American children use junk food as a reward and negotiation strategy (McGarvey et al., 2006; Pena, Dixon, & Taveras, 2012). African American parents routinely purchase food their children prefer rather than food they believe is healthy (Reed, 2013). Practices of cleaning one's plate, eating all vegetables, eating in bedrooms, eating in front of the television, and not eating as a family having become traditions in African American household; these practices have produced unhealthy behaviors that have contributed to childhood obesity (Jones et al., 2014; Powell, Wada, & Kumanyika, 2014).

Nsiah-Kumi et al., (2009) found that family history of diabetes and cardiovascular disease are associated with the parent's perception of health risks for overweight children. Once parents acknowledged is made by the family that a history of chronic disease makes the child's weight as a health concern, families were willing to assist healthcare workers in promoting positive lifestyle habits and to decrease childhood obesity in their household (Ball et al., 2012; Cowgill et al., 2014; Reed, 2013). Previous research found that the presence of comorbidity in relatives, eating and exercise habits of the child, perception of body size and appearance, and diet history in the child and caregiver predicted the caregiver's perception of health risk (Alexande, Alfonso, 2017, Cao, & Wright, 2017; Pulgaron, 2013).

Vaughn and Waldrop (2007) advocated prevention with interventions that include the entire family (i.e. parents, grandparents, extended family). Family members as well as caregivers need to be ready for changes which include making lifelong changes gradually, and focusing on permanent changes instead of quick fixes. Snethen et al. (2008) also stated that childhood obesity should involve all family members such that each member becomes aware of family weight issues and unhealthy lifestyle patterns and behaviors. Miller et al. (2007) emphasized that fathers help support effective weight management strategies when all of the family recognizes obesity as a health problem. Carcone and et al. (2011) found that coping strategies related to early life stressors were important to understand when exploring treatment retention strategies within homebased, family therapy treatments of African American youth with obesity.

Perceived Familial Genetics. Many African American parents are aware of a genetic component contributing to childhood obesity and, because that component cannot be modified, believe s to their child will necessarily be obese. This belief does not incorporate the contribution of modifiable lifestyle habits (Adkins et al., 2004). For example, studies demonstrate a maternal influence on childhood obesity even in utero, based on the mother's weight status prior to pregnancy (Dammann, Smith, & Richards, 2011; Ehrenthal et al., 2013). Ehrenthal et al., (2013) found a significant difference in pregnancy weight based on race and ethnicity such that African American woman had the highest percentage (27.8%) of pre-pregnant BMI compared to Hispanics (26.3%) and Caucasians (25.6%).

The perception of African American parents that weight is genetically predetermined and outside of the realm of their control affects their decisions related to diet and activity of their children (Davis, James, Curtis, Felts, and Daley, 2008; Hudson 2008; Pena, Dixon, & Taveras, 2012). Davis, Young, Davis, and Moll (2008) noted that a relationship in parent and child's BMI was linked to genetic factors; parental BMI

appears to be more powerful because of a genetic predisposition. Genetics have been perceived as a major cause for obesity by over 30% of caregivers when researchers assess for parental descriptors (Watkins et al., 2007). Genetics cannot be modified, but behavioral factors can be targeted and modified to decrease obesity in African Americans (Adkins et al., 2004). Traditions, beliefs, and practices of cultures vary among ethnic groups which help define how each group relates food and health and determine which foods are considered healthy and unhealthy (Kumanyika, 2008; Vollmer & Mobley, 2013).

Body Mass Index. Child BMI, as defined in Chapter 1, is significantly associated with parental BMI as demonstrated in numerous studies (Crossman, Sullivan, & Benin, 2006; Reed, Dancy, Holm, Wilbur, & Fogg, 2013; Davis et al., 2008; Schneider et al., 2013). Obesity is at least partially determined during the prenatal period and early life based on the mother's use of tobacco, pre-pregnancy weight, weight gain during pregnancy, and diagnosis of gestational or type II diabetes (Gardner et al., 2009; Taveras, Gillman, Kleinman, Rich-Edwards, & Rifas-Shiman, 2010). The literature reveals a significant relationship between BMI in African American parents and children; increased parental BMI has been associated with increased child BMI (Davis et al., 2008). Snethen, Broome, Kelber, Leicht, Joachim, and Goretzke (2008), noted that in a group of overweight men, African American fathers were disproportionately likely to have overweight or obese. Reed, Dancy, Holm, Wilbur, and Fogg (2013) similarly found a positive relationship among African American girls and their parents for obesity. Similarly, Sealy (2010a) predicted that if both parents are obese there is an 80% chance the child will be obese.

Dhoble, Patel, and Odoms-Young (2007) discussed a high incidence of childhood obesity in children born to single African American mothers who were obese. Huffman, Kanikireddy, and Patel (2010) found an association among 1,000 children of diverse ethnicity (African Americans, Caucasians, and Hispanics) such that 41% of children from single-parent homes (21.5±6.5) had body mass indexes suggestive of obesity compared to 31% of those living in dual-family homes (19.2±5.4).

Parental body mass index influences a parent's perspective of their child's body weight. Parental risk perceptions were significantly related to increased adolescent body mass index when controlled for the weight status of the parent in a study of predominately African American participants (Schneider et al., 2013). Payas, Budd, and Polansky (2010) found that maternal BMI was significantly associated with (r=0.335; p<0.05) perceived body weight of their children. African American parents and families where the majority are overweight or obese have a difficult time recognizing that these familial genes can be modified. Therefore, they are not recognizing the health risk that come with increased BMI.

Parenting styles. Parenting styles influence behaviors that contribute to healthy and unhealthy lifestyle behaviors. The three parenting styles to be discuss in this review are authoritative, authoritarian, and permissive. Authoritative parents, those who provide expectation and consequences for their child's behavior, seem to have a more positive effect on their children's eating behaviors than other parenting styles (Steinberg, Elmen, & Mounts, 1989). The authoritative parent's perception is that they are responsible for restricting, monitoring, and modeling of healthy eating habits therefore; their children were less likely to be overweight (Ball et al., 2012; Faith et al., 2012; Moore & Bailey,

2013). This parenting style includes taking in account the food preferences of the children when planning meals (Hubbs-Tail et al., 2008).

The authoritarian style of parenting, in contrast, is characterized by restriction and negative monitoring (Hubbs-Tait et al., 2008). Authoritarian parenting styles were more reflective of overweight children than authoritative and permissive styles because of less modeling of healthy eating (Faith et al., 2012; Hubbs-Tait et al., 2008; St. George & Wilson, 2012). Vollmer and Mobley (2013) found an authoritarian feeding style was the most common (33%) in households where the African American parents typically accommodated their children's food preferences and provided larger portion sizes.

Permissive parenting was associated with food restriction, negative modeling, and a lack of food preparation by parents. Parents with permissive style are more likely to have overweight or obese children than parents with authoritative style (Hubbs-Tait et al., 2008). Parents have the task of individualizing their child's care, teaching, rearing, controlling, and the socialization of their children; thereby the child's healthy or unhealthy lifestyle behaviors are directly influenced by the parents and their style of parenting (Enten & Golan, 2008; Faith et al., 2012).

Parenting styles are associated with feeding patterns. Authoritative parenting is associated with healthy feeding practices (Ball et al., 2012; Faith et al., 2012; Moore & Bailey, 2013). This positive association correlates with authoritative parents' perception of their role in monitoring and modeling healthy lifestyle behaviors. Authoritarian and permissive styles of parenting have a more negative association with feedings ((Enten & Golan, 2008; Faith et al., 2012; Hubbs-Tait et al., 2008) and are characterized by restriction and monitoring. Family dynamics appear to be a vital component of childhood

obesity, children typically model their parents and follow the practices that have become the norm for their family.

### LIFESTYLES BEHAVIORS

## **DIETARY AND NUTRITION**

Food and Advertising. Literature has documented that a family's diet and nutrition is influenced by multiple factors such as the socioeconomic status, education level, and other influences such as advertisements (Hoog et al., 2014; Xie, Gilliland, Li, & Rockett, 2003). Access to healthy foods and cost of healthy foods are barriers to healthy eating in some African American families (Jones et al., 2014; Reyes, Klotz, Herring, 2013). The literature suggests that African Americans traditionally cook meals with large quantities of sodium, sugar and fats, and fry their foods instead baking or broiling (Sealy, 2010a). Hudson (2008) found that these cooking processes contribute to obesity and causes adverse health consequences including chronic illnesses (e.g. type2 diabetes, hypertension) normally seen in adults. In a qualitative study by Sealy (2010a), parents uniformly reported that their childhood eating habits are very much associated with the parent's familial roots. Sealy, (2010a) concluded that food choices for parents and children are connected with culturally determined eating habits; parents of obese children often choose easily accessible processed foods that require minimal preparation time. When African American parents talked about their upbringing, depending on their age and generation, they referenced eating fresh vegetables that their family raised; these parents were not accustomed to eating processed or canned foods until becoming an adult (Sealy, 2010a). Busy lifestyle and lack of time for food preparation are some reasons for

changes to more process and fast foods in African American families (McFatrich et al., 2013; Sealy, 2010a).

Ethnic differences such as food-related beliefs, preferences, and behaviors have increased the risk of obesity during gestation, infancy, and childhood (Kumanyika, 2008). One important preference is African American mothers who do initiate breastfeeding are less likely to breastfeed to six months and introduce solid foods before four months of age (Pena, Dixon, & Taveras, 2012; Taveras, Gillman, Kleinman, Rich-Edwards, & Rifas-Shiman, 2010). Researchers reported that after the age of two, many parents increased the child's intake of sugar-sweetened beverages (i.e. Kool-Aid), and increased the child's consumption of fast-foods; contributing to a rapid weight gain in toddlers that continues into childhood (Dhoble, Patel, & Odoms-Young, 2007; Taveras, Gillman, Kleinman, Rich-Edwards, & Rifas-Shiman, 2010; Vollmer & Mobley, 2013). Therefore, at an early age, African Americans develop and become accustomed to taste preferences and to ignoring internal satiety cues (Cross, Hallett, Ledoux, O'Connor & Hughes, 2014; Faith et al., 2012). African Americans tend to eat at a rapid rate, ignore satiety cues, eat in response to their environment, and eat when they are not hungry, especially due to the exposure of palatable foods (Boggiano et al., 2015; Cross, Hallett, Ledoux, O'Connor & Hughes, 2014; Faith et al., 2012).

Parents and other family members tend to provide foods that children enjoy as motivation for positive behavior, rewards, and as a negotiation strategy (McGarvey et al., 2006; Lora, Hubbs-Tait, Ferris, & Wakefield, 2016; Pena, Dixon, & Taveras, 2012). These tactics of positive reinforcement contribute to the development of childhood obesity (Dhoble, Patel, & Odoms-Young, 2007). Parents need to learn how to select

healthy foods at home and in fast food restaurant, how to prepare culturally appropriate cost-effective time-saving meals, the importance of locally-grown food and proper portion sizes (Moorevile et al., 2015; Reed, 2013).

The Federal Trade Commission (FTC) reported that American companies spent \$1.6 billion on food advertisements aimed children and adolescents. Advertisements not only include food but also for sugar-sweetened beverages and sports drinks (FTC, 2008; Reed, 2013; Powell, Wada, Kumanyika, 2014; Wang, Bleich, & Gortmaker, 2008). African American children watch significantly more television than their Caucasian counterparts (Ferguson, Munoz, & Medrano, 2012) and therefore are exposed at a higher rate to advertisement for unhealthy food choices. Advertisers, in turn, direct commercials for unhealthy food products to shows geared toward African American children (Reed, 2013; Thompson, et al., 2003; Wang, Bleich, & Gortmaker, 2008). Unhealthy foods used in advertisements or commercials include those high in fats, cholesterols, sugars and calories; which produce little or no nutritional value (Ferguson, Munoz, & Medrano, 2012; Klesges et al., 2010). Outley and Taddese (2006) studied advertisements that targeted African Americans from Black Entertainment Television, Warner Brothers, and Disney Channel and found over a third (36.3%) of the advertisements were for fast food restaurants (McDonalds, Domino's Pizza, etc.), 31.3 % of advertisements were for drinks high in sugar, and the remaining percentages were for candy, sugar-sweetened cereals, and other snacks. Another study found that commercials in television shows watched on Saturday mornings portray an inflated sense of pleasure from food (Page & Brewster, 2009).

Harris, Schwartz, and Brownell (2009) conducted a study to analyze and examine cross-promotion of packaged products, age group of youths, and nutritional value of the foods promoted in one large supermarket. The majority of the foods promoted were in categories of "cereals, fruit snacks, meal products, frozen desserts and candy" (p. 411). Promotions came from television, movies, sports, toys and games and other entities such as Chuck E. Cheese and Sea World. Over the three-year period, products targeting the youth doubled with promotional agreements increasing by 44%. Third party licensed characters were at a high of 95% by 2006 but decreased to 47% in 2008 possibly due to new policies being issued by U.S. Department of Agriculture ([USDA], 2014) and media companies. The cross-promotion packaging that target youth provides little to no nutritional value. This study did not address racial or ethnic demographics.

Congressional changes in 2012 mandated the FTC to conduct a cost analysis on food marketing to children in response to childhood obesity (Powell, Harris, Fox, 2013). This report found \$1.8 billion was spent on food marketing to children in 2009; although this was a 19.5% reduction from 2006 it produced no changes in marketing. Included was the fact that school age children were exposed to up to 16 ads per day of food-related advertisements in 2011 and up to 2100 calories per day in fast-food advertisements. The FTC reports that ads for foods and beverages have been added to children's websites and forms of social media such as Facebook. Although mandates are being made in relationship to advertisements of high calorie, unhealthy foods that target children and adolescents, childhood obesity remains to be a concern.

Studies have shown higher percentages of fast food restaurants in low-income
African American neighborhoods (Pena, Dixon, & Taveras, 2012; Reed, 2013; Reed et

al., 2013). Powell, Chaloupka, and Bao (2007) found 59.3% of fast food restaurants in this study were in predominately African American neighborhoods compared to Caucasian neighborhoods. The study also found a 28% increase in fast food restaurants in low-income, African-American neighborhoods compared to in high income, Caucasian neighborhoods (Powell, Chaloupka, & Bao, 2007). Research have shown that African Americans living in low-income neighborhoods have higher access to fast-foods (Black et al., 2012; James et al., 2014; Singleton et al., 2016; Walker et al., 2010) and inadequate access to healthy foods (Ledoux et al., 2013; Fiechtner et al., 2015). James et al. (2014) found that the highest access to fast food was within 0.86 miles in a predominately low-income, African American neighborhood compared to 13.25 miles in neighborhoods with the lowest access.

Reed, Dancy, Holm, Wilbur and Fogg (2013) found that African American females living in food deserts had higher incidences of childhood obesity than their Caucasian counterparts. Food desserts were defined according to Gallagher (2011) as areas with multiple fast food and convenience stores with no conventional grocery stores. The USDA defines food deserts as urban or rural areas deprived of easy access to fresh, healthy, and affordable food. Klesges and others (2010) evaluated an obesity prevention program for African American girls participated and found no significance difference in BMI after two-years of participation, concluding that food deserts in these African American communities made it almost impossible to purchase and consume healthy foods.

Traditions of ethnic cooking are a major contributor to weight gain in this culture; families typically fry foods and cook with salt, sugar, and fats. African American parents

introduce solid foods to their children as young as four months and they also tend to reward their youth with unhealthy foods and snacks. Another contributor is that most low-SES, single-families live in food deserts where there are fast food restaurants and few convenient grocery stores that carry fresh foods. Increased television watching by African Americans has resulted in an increase in advertisements of sweetened beverages, cereals, and fast foods aimed at children. In conclusion, diet and nutrition is a large contributor to childhood obesity. Parents are responsible for choices made in purchasing, preparing, consuming, and role modeling foods. Both parental and child preferences are influenced by advertising of unhealthy popular foods, fast foods, and high caloric foods.

#### PHYSICAL ACTIVITY AND SEDENTARY BEHAVIORS

Sedentary Behaviors/Physical Activity. Research shows a positive association between BMI and sedentary behaviors (Mitchell, Pate, & Nader, 2013). Mathews et al. (2008) found that 6 to 11-year-olds spend six hours a day in sedentary behaviors whereas 16 to 19-year-olds typically spend up to eight hours a day; this study suggests an increase in sedentary lifestyle behaviors from childhood to adolescence. The American Academy of Pediatrics recommends less than two hours of screen time per day for children; however, literature supports the fact that African Americans exceeded that amount (Carroll-Scott et al., 2013; Conlon et al., 2015; Hsu et al., 2011).

Increased screentime and insufficient sleep have impacted the obesity epidemic because children tend to watch more television and spend time on electronic devices and computers instead of sleeping (Anderson & Whitaker, 2010; Owens, Healy, Mathews, & Dunstan, 2010; Taveras, 2006; Taveras, Rifas-Shiman, Oken, Gunderson, & Gillman,

2008; Taveras et al., 2010). Poor sleep in children is also attributed to having television and other screen time devices such as cell phones, electronic games, and computers in the bedroom causing less effective sleep, increasing the risk of obesity (Taveras et al., 2008; Taveras et al., 2010). Research has indicated that poor sleep habits is associated with obesity (Chaput & Dutil, 2016; Haines et al., 2013).

Mitchell, Pate, Beets and Nader's (2013) correlated sedentary behaviors with changes in body mass index in nine to fifteen year olds over time. This longitudinal study observed children at nine, eleven, twelve, and fifteen years of age. This study found increased numbers of children with BMIs at the 90<sup>th</sup>, 75<sup>th</sup> and 50<sup>th</sup> percentiles over the four time points. A previous study (Mathews et al., 2008) showed that children aged 6 to 11 averaged six hours a day of sedentary behaviors and increased by two hours by the time the child reached adolescents with non-Hispanic African American children and adolescents spending approximately 7.5 hours in sedentary behavior.

African American mothers perceived that screentime activities (i.e. watching television, playing with computer and video game) replace physical activity, whereas, Caucasian mothers tend to believe that sedentary behaviors contribute to excess snacking and other unhealthy habits by children and adolescents (Volmer & Mobley, 2013; Matheson et al., 2004; Reed, 2013). African American parents perceive numerous barriers to physical activity. African American parents reported that their children lived in neighborhoods with no access to sidewalks (26.7%) no parks or playgrounds (19.2%) no access to recreation, unsafe neighborhoods (14%) and neighborhoods with vandalisms (11.6%) (Singh, Siahpush, & Kogan, 2010a). In addition, there was a decline in children walking or biking to school in recent years, mainly among minority children due to

school distances and transportation (McDonald, 2007). There have been some increases in physical activity in elementary schools where states have mandated it (Singh et al., 2010a). However, there are still improvements to be made regarding decreases in physical education and recess at other schools, transportation options for travel to and from school, and neighborhood safety; these issues have all impacted physical activity in African American children (McDonald, 2007; Singh et al., 2010a).

African American children who are obese have a higher incidence of sedentary behaviors than their Caucasian counterparts and these sedentary behaviors increase with age. Possible explanations for sedentary behaviors include a preference for watching television and playing with electronics over physical activity. Poor sleep habits exacerbated by the presence of electronics in the bedrooms and the lack of family meals. The absence of playgrounds and community-based programs that promote physical activity in African American neighborhoods is also contributory.

### **BARRIERS**

*Barriers*. Parents report numerous barriers to intervening in their children's weight. These barriers include the misperception of obesity in their children, a lack of parental control over their children's diet, and a lack of setting time limitations on screen time activities (Spivack et al., 2010). Parents report feeling that they lack control over their child's lifestyle choices as a result of time constraints, child food preferences, low motivation to exercise, and familial beliefs about behavior change (Lim, Zollner, Ajrouch, & Ismail, 2011; Sealy, 2010a; Vollmer & Mobley, 2013). Themes that emerged from one qualitative study of childhood obesity in African Americans (McFatrich et al.,

2013) were "the cycle of stress related to family responsibilities" (p. 342) and "barriers to asking for help or feelings of inadequacy" (p. 343). Another barrier expressed by mothers was the expectation of filling every familial need, eventually resulting in feelings of inadequacy (McFatrich et al., 2013). Parents are overwhelmed with life stressors and responsibilities which has resulting in a lapse into patterns of unhealthy behaviors.

African American parents, particularly women, often see asking for assistance in their parenting role as a barrier because this makes them appear weak in the eyes of others (McFatrich et al., 2013). Spivack (2010) listed problems that the family perceived as barriers to intervention such as lack of parental motivation, excessive television viewing, lack of exercise, and fast-food consumption. Huffman, Kanikireddy, and Patel, (2010) found that parents need to be included in developing obesity prevention programs so that economic and cultural barriers can be avoided.

In a qualitative study, barriers to healthy nutrition and exercise included: parents not having time to prepare meals, sedentary lifestyle preference, environmental issues, socio-economic status, societal norms, and a lack of knowledge (Li, Robinson, Carter, & Gupta, 2014). Barrier themes from an earlier study Burnet et al., (2007) included lack of knowledge about child's health and nutrition, lack of advice from health care providers about child's weight, and the inability of parents to set limits on television and food.

Reed (2013) noted barriers to eating healthy as problems with access to fresh fruits and vegetables, taste, social norms, and the marketing of unhealthy food. Other barriers in the literature include social pressures to eat unhealthful food, unappealing look or taste of healthful food and lack of variety in healthful food (Khandpur, Blaine, Fisher, & Davison, 2014; Reed, 2013).

*Time Constraints.* Parents report time constraints have appeared as a major barrier to healthy eating due to busy lifestyles (Reed, 2013; Sealy, 2010a). This includes the time parents have to shop, prepare, and consume meals. Time is an important factor because of increased roles and responsibilities of working parents trying to manage work, home, and social responsibilities (Sealy, 2010a). Some mothers pick up fast-food due to time constraints related to their work schedules and their child's extracurricular activities (Burnet et al., 2007; Pena et al., 2012; Snerthen et al., 2008). Some mothers have discussed using 30-minute meals where food is purchased and prepared in advance and then frozen for quick fixes (Sealy, 2010a). Second to time constraints, family preferences are noted to be a barrier to healthy lifestyle choices (DiSantis et al., 2013; Hubbs-Tait et al., 2008; Reed, 2013; Snerthen et al., 2008) followed by cost. Ready to eat foods are readily available, economical and preferred by the family. Children prefer to watch television, talk on the telephone, watch movies and use computers while eating pizza, hamburgers, and French fries rather than fresh fruits and vegetables (Burnet et. al., 2007; Dhoble et al., 2007; Matheson, et al., 2004).

In a relative recent qualitative study, Cowgill et al., (2014) found that barriers such as lack of skill and knowledge, variable availability of community-based programs for obesity prevention and availability of culturally-sensitive programs emerged as themes in focus groups of African American parents. The data revealed that many minority parents lack knowledge of how to read and interpret food labels. The parents in this study wanted to know what constituted a healthy meal and wanted assistance on how to navigate, and find accurate information on the internet. Lastly, participants suggested a need for culturally-sensitive programs to assist diverse ethnic groups (Cowgill et al.,

2014). The authors suggest that once a majority of African Americans have accepted the challenge to promote healthier lifestyle habits by purchasing and cooking healthier food and participating in regular physical activities, other more reluctant individuals will follow.

Socioeconomic Status. Poverty and low income are important barriers to achieving a healthy weight (Chang & Lauderdale, 2005; Hughes, Areghan, & Knight, 2005; Pan, Blanck, Sherry, Kalenius, & Grummer-Strawn, 2012; Scott & Wilson, 2011; Singh, Siahpush, & Kogan, 2010b). Studies have shown that African Americans mothers with low-socioeconomic status had higher body mass indexes than those with higher income (Payas, Budd, & Polansky, 2010; Taveras, Gillman, Kleinman, Rich-Edwards, & Rifas-Shiman, 2010). According to Scott and Wilson (2011), poverty is a vital component that affects one's health status; therefore, affecting a large portion of African Americans. The lack of sufficient funding in communities leave some African Americans, especially those that do not qualify for public assistance or have money to pay for affordable health care, without any health benefits (Scott & Wilson, 2011). However, contrary to these studies, Wang and Zhang (2006) found that there was no difference in obesity rates based among African American based on socioeconomic status (SES).

African American low-income areas have the highest rates of obesity in the U.S. (Ogden et al., 2012). Low income, overweight African Americans are less active than those with higher income and non-minorities (Delva, Johnston, & O'Malley, 2007). Literature has shown that motivation and emotional social support from parents and peers are needed to promoted physical activity and decreased health disparities in children and

adolescents living in low SES areas (St. George, Wilson, Lawman, & Van Horn, 2013; Carcone et al., 2013). A study of low-income African American adolescents utilizing motivation, emotional support, and a physical activity program showed positive results in lowering BMI (St. George et al., 2013).

Baxter, Guinn, Tebbs, and Royer, (2013) found that the Palmetto Achievement Challenge Test (PACT) scores, which measure state standards for English, math, social studies and science courses, from their study were found not to be related to BMI but had a positive relationship to SES and race (p<0.0001); scores were lowest for low SES and highest for high SES children. Pinnard and others (2012) conducted a successful 12-week structured program to treat childhood obesity in low socioeconomic families. This study demonstrated that African American parent-child dyads with a median household income of \$15,000-\$20,000 a year had a significant decrease in BMI z-score (t=-3.28, p<.01), increase in lean muscle mass (t=-4.03, p<.01), and improvement in overall health related quality of life (t=-4.23, p<.01) after the three-month study (Pinnard et al., 2012).

Data is mixed reviews with regard to the relationship between income status and childhood obesity. Most studies revealed that childhood obesity is highest in low-SES populations. Other studies revealed that weight in individuals of lower socio-economic status is also affected by factors such as lack of education, availability and access to healthy foods, and lack of transportation. Only one study revealed positive outcomes from a feasibility study of a family-intervention program in a low-income setting (Pinnard et al., 2012).

Communication between Healthcare Providers and Parents/Caregivers. Another major barrier to combatting obesity in African American children is the lack of

communication between the child's healthcare providers and the parents. Some of the disparities seen in African Americans children's obesity rates may be associated with communication gaps between parents and their child's healthcare provider (Taveras, Gortmaker, Mitchell, & Gillman, 2008). However, few studies mention a discussion between health care providers and African American parents. Healthcare providers are reluctant to discuss childhood obesity for multiple reasons. They perceived the discussion as a risk that would damage their provider-caregiver relationship and feel the discussion will be viewed by the caregiver as a negative provider perception of their parental responsibility since they are responsible for their' child's behavior choices (Carcone et al., 2011). In one qualitative study, barriers for parents included a distrust of healthcare providers and fear of cultural insensitivity (Carcone et al., 2011). Pena, Dixon, & Tayeras (2012) proposed that healthcare providers communicate with parents about weight issues and query them about their beliefs and practices so they can better understand the parent's perceptions related to this sensitive issue. Interventions that open communication barriers between parents and healthcare providers are needed so that behavioral changes can be initiated. For health care providers, the three main barriers to communication with African Americans about weight are in the areas of parental, provider, and professional.

### Parental Role

The parental response when a provider mentions that their child may have a weight problem can be relief, disinterest, denial, or even anger (Caprio et. al., 2008; Mikhailovich & Morrison, 2007). Although parental response to hearing about a

potential weight problem in their child is unpredictable, some parents may appear upset, some may dismiss the information, and some may take it seriously and make needed changes (Mikhailovich & Morrison, 2007). Some African American mothers in a mixed-methods study that had confidence in communicating with providers included those with male providers as well as those that were included in making decisions about their child, while those that did not have confidence were usually seen by providers with less participatory communication and provided care for lower income patients (Godoy, Mitchell, Shabazz, Wissow, & Horn, 2014).

Trust plays an important role in communication between African American parents and their children's healthcare providers (Guffey & Yang, 2012; Horn, Mitchell, Wang, Joseph, & Wissow, 2012; Sewell, 2015). A study by Guffey and Yang (2012) compared trust levels from the years 1998, 2002, and 2006 among African Americans and Caucasians to find that African Americans were more likely to trust their healthcare providers in the year 1998 and 2006 but not in 2002. African American parental trust of health care providers was more positive if the parent had multiple children and had a previous relationship and whether the provider's practice was hospital-based versus private practice (Horn et al., 2013). African Americans are less apt to participate in activities that will reduce weight in their children and efforts are often ineffective due to their mistrust of healthcare providers and fear of cultural insensitivity (Carcone et al., 2011). Parents who trust their providers are more willing to seek healthcare (Sewell, 2015). Parents trust their healthcare provider to communicate to them actual and potential health issues with their children.

#### Provider Role

Initial communication, even preventive, about a child's body weight is vital for effective weight management to occur (Mikhailovich & Morrison, 2007). This communication between the healthcare provider and the parent is essential in addressing childhood obesity. There is a need for providers to communicate objective findings, provide emotional support, and resources according to practice guidelines (Caprio et al., 2008). These discussions about a child's body weight by the healthcare provider should be routine when discussing health risk with parents and families (Caprio et al., 2008). Previous research has stated that healthcare providers must be mindful of the stigma perceived by African American parents about their child's body weight, be sensitive to the needs of the culture, and not blame the parents (Caprio et al., Lupi, Haddad, Gazmararian, & Rask, 2014; Mikhailovich & Morrison, 2007).

Strategies to aid health care providers included early recognition that lifestyle behaviors, taste preferences, physical activity, sleep habits, and motor skills are established in early childhood (DiSantis, et al., 2013; Pena, Dixon, and Taveras, 2012). Scott and Wilson (2011) suggested a need for community-based interventions that include both local healthcare providers and the African American community (Scott & Wilson, 2011). A study of low-income families (Pinnard et al., 2012) found that healthcare providers often voiced a lack of time and resources as reasons for unsuccessful interventions for childhood obesity. However, the providers valued the partnership with families which allowed them to reach more minority families (Pinnard et al., 2012). Earlier research noted that parents were more likely to be ready for change addressing

childhood obesity if the issue of weight was acknowledged by the provider and communicated to them (Rhee, DeLago, Arscott-Mills, Mehta, and Davis, 2005).

Lowenstein and others (2013) explored the relationship and communication between African American fathers and providers related to their child's weight, diet, and physical activity. They found that the relationship was mutually engaging except for the discussion of diet and exercise which was not a normal part of the healthy child visit. Fathers didn't recognize the importance of discussing diet and exercise as related to an unhealthy health status (Lowenstein et al., 2013).

Some healthcare providers acknowledged responsibility for raising the issue of obesity which they considered it a social and family problem (Plourde, 2012). Other healthcare providers reported being more willing to initiate conversations with parents and/or caregivers when obesity is attributable to another comorbid condition (Sealy, 2010b). Some reasons healthcare providers may fail to recognize that an overweight child is at risk for obesity include their own lack of confidence, proficient, and training in treating childhood obesity. These providers may also lack the necessary resources to intervene (Taveras et al., 2008). Some healthcare providers believe they have no control over circumstances that affect African Americans such as income, community resources, and lack of caregiver concern (Spivack et al., 2010).

### Professional Role

Professional barriers include lack of reimbursement from insurance companies, lack of educational resources for addressing obesity, time constraints, and providers and other professionals being unfamiliar with the CDC and American Academy of Pediatrics

(AAP) guidelines that address childhood obesity (Spivack et al., 2010). Multiple disciplines besides the American Academy of Pediatrics (AAP), the AHA, and the CDC, including the Endocrine Society and the U.S. Preventive Services Task force, recommend active communication and engagement of healthcare providers and parents in setting goals associated with childhood obesity and risk factors (Lupi et al., 2014; Spivack et al., 2010).

There remains a challenge of reimbursement when it comes to weight management in childhood obesity and reimbursement is affected by insurance coverage from the federal and state Baum et al., 2015: Wilfley et al., 2017). According to healthcare providers that attended a conference supported by the AAP and the Obesity Society, lack of reimbursement for services related to childhood obesity was a barrier to treatment recommendations (Wilfley et al., 2017). Some providers stated that some of them were reimbursed by Medicaid 58% of the time and private insurance 41% of the time while others healthcare team members such as dieticians, behavioral counselors, and exercise specialists were reimbursed at lower rates than the providers (Wilfley et al., 2017). Childhood obesity cost include trips to emergency rooms, prescription medications, and medical specialty care. Therefore, stakeholders need to be made aware of research that supports treatment of childhood obesity, positive, patient-related variables, return on investment and mandates by the American Medical Association that obesity is a disease (Wilfley et al., 2017).

The American Heart Association acknowledged issues related to the role of healthcare providers in treating and preventing AA childhood obesity in are two AHA scientific statements regarding childhood obesity (Kelly et al., 2013; Li et al., 2013). The

first statement evaluated social media childhood obesity, this included any social network based interventions and found that social media was a viable avenue for weight loss programs (Li et al., 2013). The second statement addressed challenges in treating severity in children and adolescents by justifying a standardized definition, raising more awareness on the epidemic and consequences, challenges of treatment options, and the need for further research in this area (Kelly et al., 2013).

More recently, Carcone et al. (2013), studied communication behaviors that promoted healthy change in African Americans adolescents. This involved using motivational interviewing and statements with healthcare providers, adolescents, and parents. There is poor adherence to many treatment modalities in African Americans. Changing communication strategies such that adolescents were allowed to express their own desires, abilities, and reason for weight loss showed the most (62%) positive response from adolescents (Carcone et al., 2013). Other interventions related to communication between weight loss providers and African American adolescents and their parents are needed.

According to Hansen et al., (2016), there has been an increased in healthcare providers' notification of obesity status in children and adolescents. However, it appears that healthcare providers have not taken full advantage of the opportunity to intervene in weight reduction methods. There is an opportunity for weight reduction interventions, however, health care providers are lacking in the opportunity to introduce and manage weight loss interventions and treatments.

In another study by Lupi et al., (2014), there were nine themes that emerged when they explored parental perceptions of the families and healthcare provider's roles in

management of childhood obesity. These themes included the parents being knowledgeable of consequences, but had no concept of BMI because they based their decisions of weight status on visual cues or symptoms. The parents trusted physician to communicate weight problems but didn't link this to other weight management resources. Parents did not want their child labeled as overweight but favored familial behavioral changes. Parents trust that their healthcare providers would be credible in providing care to their child's health including any components of body weight issues.

Communications with healthcare providers is essential in initiating treatment of childhood obesity. Mistrust and cultural insecurities, lack of reimbursement, time constraints, and lack of confidence in knowledge have led to this avoidance. It is evident that some healthcare providers believe that there are barriers (e.g. income, neighborhood safety) precluding successful interventions to assist families with obese children. However, communication with parents about their children's weight and its relationship to health is a necessary first step to trigger needed changes.

Community/Neighborhood. Crossman and et al. (2006) noted that the family environment may be a predictor of body weight in adolescents. Environmental factors such as what type of food consumed, accessibility of healthy foods, and location of meals impact body weight status. Lifestyle behaviors, including diet, activity, and sedentary behaviors of children have been found to be a direct reflection of their social and cultural environments (Golan & Crow, 2004). Many African Americans live in neighborhoods with a limited availability of fresh fruits and vegetables, whole grains, and low-fat dairy products but will have multiple fast food restaurants (Kumanyika, 2008; Lutfiyya, Garcia, Dankwa, Young, & Lipsky, 2008; Sealy, 2010a; Sealy, 2010b). The increasing costs of

food in these neighborhoods continue to make it harder for parents to afford quality foods such as fresh fruits and vegetables (DiSantis et al., 20013; Robert Wood Johnson Foundation [RWJF], 2009; Sealy, 2010a; Sealy, 2010b). These families lack access to grocery stores and/or farmer markets with healthy foods. Some African American parents and other minorities report that grocery stores in their neighborhoods sell foods that appear to have been infested with bugs or foods that are expired (Sealy, 2010b). Food availability and access present a major health problem and encourages unhealthy habits in these communities (Kolahdooz et al., 2016). A significant number of lowincome African Americans live in food deserts (Reed et al., 2013; Klesges et al., 2010)

Neighborhood crime and safety, food marketing, transportation issues, access to recreational facilities, social capital and support, all have an impact on influencing nutrition and physical activity among African American children and adolescents (Hudson, 2008; Pena et al., 2012; Reed, 2013; Singh, Siahpush, & Kogan, 2010a). African American neighborhoods may not be conducive to participating in health-related activity practices because they lack sidewalks, bicycle lanes, and walking trails (Dulin-Keita, Thind, Affuso, & Baskin, 2013). Many African Americans live in communities where they encounter daily safety issues such as abandoned building, crime, drugs, graffiti, gangs, vandalism, and the mistrust of neighbors (Carcone et al., 2011; Dulin-Keita, Thind, Affuso, & Baskin, 2013; Reed, 2013; Singh, Siahpush, & Kogan, 2010a). Therefore, safety is a higher priority than physical activity.

Some neighborhoods have joined forces to share parenting tactics and provide safety in their neighborhoods (St. George & Wilson, 2012; Reed, 2013). Parent participants in focus groups have stated that families generally participate in community-

based programs on Saturdays and that there it is helpful to have a resource person to organize family participation around busy weekday schedules (Cowgill et al., 2014). Reed (2013) suggested that strategies to help address childhood obesity in African Americans include practices and beliefs of the parents as well as the neighborhood. Parents/family/communities need to be involved in the initial steps of any health promotion behavior change that involves their children; this will help with buy-in and participation in improved diet and increased physical activity (Cowgill et al., 2014). It is posited that if the child sees the behavior in parents, then the child will be engaged as well (Cowgill et al., 2014).

The community and neighborhoods that African American reside in have contributed to their incidences of childhood obesity. Some communities/neighborhoods lack convenient grocery stores and farmer's markets from which to purchase fresh produce. Residents, in turn, lack transportation and finances to go to grocery stores with better food choices and healthier options. Residents of minority neighborhoods have a higher concern for safety than residents of Caucasian neighborhoods due to gangs and mistrust of neighbors (Carcone et al., 2011; Dulin-Keita, Thind, Affuso, & Baskin, 2013; Reed, 2013; Singh, Siahpush, & Kogan, 2010a). These settings frequently do not have access to recreational facilities. The threat of crime prevents children from paying outside without parental supervision in many neighborhoods, but has greater effect in low social economic status communities, a disparity impacting African Americans. In addition, minority or low SES communities frequently do not have access to recreational facilities. African American parents view safety as survival; therefore, an outdoor activity such as walking may not be a priority in some instances. These families view

indoor sedentary behaviors as a safety mechanism which unfortunately adds to childhood obesity.

In summary, the literature revealed multiple barriers in the African American family that contribute to unhealthy lifestyle habits and obesity. However, barriers in the African American family that have been attributed to childhood obesity include lack of access to healthy food, crime and neighborhood safety, a lack of transportation, time constraints, child preferences, lack of motivation, lack of concern from healthcare providers, and parents not ready for change. Other barriers from parents include life stressors and family responsibilities. Many of African American parents do not perceive their children as having a body weight problem or potential health risk; they tend to trust that the health care provider will notify them of health issues.

### AFRICAN AMERICAN PARENTS AND THE STATE OF MISSISSIPPI

African Americans Living in Mississippi

The State of Mississippi. It is known from the 2006-2008 Behavioral Risk Factor Surveillance System survey that non-Hispanics African Americans in the Southern region of the United States continued to compose the greatest prevalence of obesity (CDC, 2009; Li, Robinson, Carter, & Gupta, 2014). The southern region of the United States has continuously been inundated with the highest prevalence of children, adolescent and adult obesity, with the greatest incidence among African American females (Gamble, et al., 2012; Ogden et al., 2014). The Black Belk is a region of the country from Tennessee through Mississippi, Georgia, and Alabama that tends to also have a high percentage of

low-income rural African Americans and a high incidence of childhood obesity (Li, Robinson, Carter, & Gupta, 2014). The Child and Youth Prevalence of Obesity Surveys (CAYPOS) for Mississippi, similar to the NHANES' revealed that the highest prevalence of obesity in the state was seen African Americans (45.8%), particular the female (49.2%) in school-age youth (Zhang et al., 2014). Mississippi (39.7%), Louisiana (39.8%), and Alabama (35%) represent the states in the southern region with the highest incidence of obesity in children (NSCH, 2011-12). The state of Mississippi's ranking for childhood obesity has seen an increase from being 34th in the nation in 2003 to an alltime high of 51<sup>st</sup> place in 2007 where it remains with the highest incidence (National Survey of Children's Health [NSCH], 2011-12). According to the NSCH 2007 data for Mississippi, 54.3% of African American children ages 10-17 year were overweight or obese compared to 41.1% nationally. Newer data from the 2011-2012 NSCH survey for Mississippi show that 39.7 % of all children are obese compared to 31.3% nationwide (NSCH, 2011-12). Of those children, 39.8% of African American children are overweight or obese compared to 41.6% nationwide (NSCH, 2011-12). Also, 36.6% of Caucasian children were overweight or obese compared to 26.3% nationwide (NSCH, 2011-12). The Center for Mississippi Health Policy (2012) reported a decrease in prevalence rate from 25.5% in 2005 to 23.7% in 2011 which was attributed to the Coordinated School Health Program but disparities between African Americans and Caucasians still exist. According to the National Survey of Children's Health (2011-12), state profile for Mississippi, 47% of the overweight or obese children were not insured at the time of the survey and 31.8% of households in Mississippi were living at 400% or lower of the federal poverty level as opposed to 21.9 % nationwide (NSCH, 2011-12).

A unique set of factors that contribute to the prevalence of obesity in Mississippi, a largely rural state. Rural areas have been found to have high obesity rates due to poverty rates, lack or accessibility to healthy foods, travel time, lack of availability of resources, and lack of adequate health education (West, Weddell, Whetstone, & Pitts, 2013). One example would be the Mississippi Delta, one of the state's most undeserved areas, where approximately 75% of the population is African Americans and a one-third of the population lives below the poverty level (Hughes, Areghan, & Knight, 2005; U.S. Census, 2010). The Mississippi Delta is a community in the northern region of the state which is composed of mostly underserved, African Americans with poor health where children of low-socioeconomic status have a higher incidence of obesity and chronic diseases such as hypertension and diabetes than the rest of the state and even the nation (U.S. Census, 2010). Gamble et al. (2012) studied obesity and the health risk of children living in the Mississippi Delta where disparities remain between races as well as between different areas of the state. African Americans (82%) composed the majority of participants in which 47.1 % of children were found to be overweight or obese and 77.9% were found to be at-risk by waist circumference and waist to height ratio. It is speculated that poor academic performance may be related to the weight status of children in Mississippi (Gamble et al., 2012).

Another example of a rural area in Mississippi would be the city of Canton, where half of the adolescents are overweight or at risk for being overweight (Hughes, Areghan, & Knight, 2005). According to the U.S. Census (2010), 74.7% of Canton's population is African American with 30.2% of the population living below poverty, which is similar to the Delta. There is significant history of family members with diabetes, stroke, and heart

disease living in this area of Mississippi (Hughes, Areghan, & Knight, 2005). Lack of access to healthcare, lack of physical education in schools, and the inability to access grocery stores with fresh produce are examples of barriers that contribute to childhood obesity in the state and particularly, in its African American residents (Hughes, Areghan, & Knight, 2005). Literature review revealed that childhood obesity is highly influenced by accessibility to healthy foods (Carroll-Scott et al., 2013; Leung et al., 2011; Li, Robinson, Carter, & Gupta, 2014). Mississippi Medicaid's Early and Periodic Screening, Diagnosis, and Treatment program provides indecisive guidance regarding coverage of nutritional and/or behavioral therapy for childhood obesity, despite paying the healthcare costs for obese children suffering from obesity-related chronic illnesses (Lee, Sheer, Lopez, & Rosenbaum, 2010).

Several recent initiatives have attempted to address childhood obesity rates in Mississippi (MSDE, 2014). The first such initiative was to improve built environments to promote physical activity in communities. The second was to replace fryers with combination-ovens in school kitchens. The third was to increase the number of school nurses in the schools. The fourth was support comprehensive fitness in schools. The fifth was to improve state standards for day care centers and youth programs to promote healthy lifestyles. The sixth was to encourage recipients of public benefit programs to purchase healthy foods. The seventh was to restrict advertising of unhealthy foods to children and/or require public service announcement that offer healthy messages. The eighth was to require schools to provide BMI reports to parents. The ninth was to improve access to supermarkets and fresh produce. The tenth was to require labeling of menus and prepared foods from restaurants. Findings from this work suggest that

Mississippi has the second lowest rate of fruit and vegetable consumption in the nation and that those living in rural area were 23.4% less likely to consume the amount of fruits and vegetables recommended by the CDC (MSDE, 2014). In an effort to improve obesity rates, increase safe space for physical activity, and increase vegetable consumption, communities are adding parks, green spaces, and sidewalks for exercise while establishing local farmer markets and community gardens for access to healthier fruits and vegetables (MSDE, 2014).

The Mississippi State Department of Health (2016) established an Obesity Action Plan in 2016. This action plan has four main goals with defined strategies for implementation. The first goal is to improve state and local capacity and support to address physical activity and health eating across the lifespan in MS. The second is to develop an intergenerational, culturally sensitive public awareness campaign on preventing obesity through healthy choices and physical activity. The third goal is to increase workplace awareness of the obesity issue and increase the number of worksites that have environments that support wellness, including weight management, healthy food choices, physical activity, and lactation support. The final goal is to increase support for promotion of healthy eating and physical activity within Mississippi's health care system and among health care professionals.

Additionally, the Alliance for a Healthier Generation and America's beverage companies have extended their Balance Calorie Community Initiative to include Mississippi in the fall of 2016. One of the state's poorest community, the Mississippi Delta, was among the first to be added. These include the counties of Coahoma, Panola, Quitman, and Tunica all located in the Mississippi Delta. According to the Alliance

(2016), one-fifth of teens drink enough sugar sweetened beverages to equate to an additional meal.

According to the Food, Research, and Action Center (2013), 91% of Mississippi school children receive free or reduced-priced lunches. To ensure high quality food consumption during school lunch, Mississippi has implemented multiple programs designed to provide adequate time for eating, healthier foods with less fat and calories, limited sugary beverages, and have development a video emphasizing the safety of foods brought to school (Mississippi Association of School Administrators [MASA], 2008). There is no information available based on race/ethnicity. However, Davis and Davis (2008) found that Mississippi children did not have the proper resources or support in schools to support a desire to lose weight.

The state of Mississippi in its fight to combat childhood obesity has passed legislation, the Mississippi Healthy Students Act, which requires schools to create policies that show an increase in physical activity and healthier dietary habits (Gamble et al., 2012). Schools are required to implement 50 minutes of physical activity that must be in physical education (Gamble et al., 2012, MASA, 2008). Prior to legislation, there was a lack of structured exercises in Mississippi schools.

Mississippi has made significantly improvements in school policies to ensure healthy foods and an increase in physical activity to promote healthy lifestyle behaviors. Zhang and others (2014) studied the prevalence and trends of overweight and obese children for an eight-year period between 2005 and 2013 among public school districts in Mississippi. Mississippi has seen the rate of childhood obesity drop in Caucasians and elementary school children from 40.6% in 2005 to 36.8% in 2013 but African Americans

only saw a slight drop from 46.4% in 2005 to 45.8% in 2013 (Zhang et al., 2014). The state of Mississippi is attempting to change the statistics relating to childhood obesity but it will be a generation before major declines are seen (Childhood Obesity Action Network, 2009).

Yeary, Cornell, Turner, Moore, Bursac, Prewitt, and West (2011) conducted a feasibility weight loss study in the rural Mississippi Delta with African Americans participants. This rural community was chosen because of its higher prevalence of chronic disease such as diabetes, obesity, and hypertension in African American than Caucasians. Using a community-based participatory research approach, they noted a high retention of participants, significant positive outcomes, positive evaluations, and feasibility of this culturally adapted intervention in rural African American churches (Yeary et al., 2011).

Mississippi has the highest incidence of adult obesity in the nation and a correspondingly high incidence of childhood obesity. While legislation has mandated changes in elementary and middle schools to serve healthier meals and increase physical activity, this is not continued into the high school. There are communities in Mississippi with critically high incidences of obesity as well as associated chronic diseases such as cardiovascular disease and diabetes. While elementary schools have not seen a significant decrease in childhood obesity from the programs that have been implemented, there has also been no increase in obesity rates. African American childhood obesity continues to see an increase despite attempts at an intervention. Further education of healthier lifestyle behaviors that can be initiated at school and carried into the home

setting is warranted. An understanding of the African American cultural perspectives regarding obesity for this community is missing.

### **STAKEHOLDERS**

Stakeholders. Stakeholders in the problem of childhood obesity include: government entities, health care workers, schools, communities, the obese child, and the families of obese children. Stakeholders have the responsibility of identifying, intervening, and promoting initiatives to improve children's health (Kersch, Stroup, & Taylor, 2011; Torre, Akre', & Suris, 2010; West, Weddell, Whetstone, & Pitts, 2013; Yeary et al., 2011). States have the authority to act in areas of health especially when they relate to vulnerable population such as children (Gamble et al., 2012; Ryan, 2009; MSDE, 2014). Singh, Siahpush, and Kogan (2010a; 2010b) recommend social policy measures aimed at improving social and physical environments that are conducive to obesity. Ethical issues such as individual autonomy versus state authority are concerns with the phenomenon of childhood obesity (Phillips, Ryan, Reczynski, 2011).

According to Brennan, Castro, Brownson, Claus, and Orleans (2011), local, state, and national decision makers have a need to take action to increase healthy eating and active living among those who are at great risk, particularly African Americans and Hispanics. An interdisplinary approach can help explain the complexity of childhood obesity and inform the public on strategies of prevention (Hilbert et al., 2008; West, Weddell, Whetstone, & Pitts, 2013). Robert Wood Johnson Foundation (RWJF) has funded multiple grants that assist states with public policies related to childhood obesity. In Mississippi, Robert Wood Johnson grant funding has assisted with the state policy on

vending machines in schools (Childhood Obesity, 2009). Additionally, it has been recommended that public policies such as those funded by RWJF and the "Let's Move" initiative led by former First Lady Michelle Obama, the White House, and the Department of Health and Human Services be continued (Cohen, Bishop-Josef, & Kahn, 2012; Kersh, Stroup, Taylor, 2011).

Although the solution to obesity is lifelong habits of proper diet, nutrition and physical activity, obesity continues to be a problem especially for African American children and adolescents (Amis, Wright, Dyson, Vardaman, & Ferry, 2012; Sharma, 2011; Wright, Norris, Giger, and Zulma, 2012). African Americans are less likely to benefit from traditional weight reduction programs (Kim, Linnan, Campbell, Brooks, Koeing, & Wiesen, 2008; McFatrich et al., 2013). McFatrich et al. (2013) noted three major influential areas (home, school, church) where healthy and unhealthy lifestyle behaviors are developed that would impact children especially those overweight or atrisk. It is known that strategies to combat childhood obesity should include changes in a child's lifestyle behaviors including: healthier dietary habits; regular physical activity; and decreased screen time (Kamik & Kanekar, 2012; Ogden et al., 2010).

State health departments have a stake in helping to implement community-based programs. For example, North Carolina's Division of Public Health has assisted with carrying out interventions in communities, schools, worksites, daycares, and churches (Cousins, Langer, Rhew, & Thomas, 2011). Mississippi State Department of Health partnered with other agencies such as the MS Office of Healthy Schools (MOHS) to solidify health programs under one entity to service the school districts in Mississippi with the assistance of school nurses (MSDH, 2009). This partnership provides training,

education, funding, and other services to help facilitate healthy programs in Mississippi schools (MOHS, 2008).

Wright, Norris, Giger, and Zulma (2012) noted that lower socioeconomic status and racial and ethnic disparities are a few of the factors that put children at greater risk of being obese. According to the authors, these must be addressed by stakeholders within the family, society, and community. The study examined effects of a family-focused coordinated school health program on weight status with community and parental participation. The positive outcomes from this pilot suggested that an obesity prevention program such as this could be effective in reducing BMI if it is culturally, and linguistically appropriate, and family-focused for minority populations (Wright, Norris, Giger, & Zulma, 2012). Parental assistance is available from resources such as schools, policymakers, and healthcare providers which begs the question: why are African American parents reluctant to help their children?

Stakeholders play a vital role in understanding cultural disparities in childhood obesity. They can assist with funding of necessary programs, education, and utilize community resources. No one entity can work alone, it takes leaders from the government, school, community, private industry, healthcare providers, and families working together to understand the issues related to childhood obesity in minority families. Although it is known that the traditional weight loss methods will decrease obesity, this dissertation will investigate the parental cultural perspectives related to why African American children continue to have a higher prevalence of childhood obesity than their Caucasian counterparts.

Schools. Schools are an influential agency on foods and physical activity for African American children (McFatrich et al., 2013; Dulin-Keita et al., 2013; Torre, Akre', & Suris, 2010). Policy initiatives on the local, state, and federal level are beginning to influence foods (i.e. vending machines, a la carte lines) that are available in schools (Kersh, Stroup, Taylor, 2011; Reed, Dancy, Holm, Wilbur, & Fogg, 2013). Reed, Dancy, Holm, Wilbur, and Fogg (2013) suggest that school health professionals working with African Americans can inspire change by providing nutritional education on healthier food choices and strategies that affect healthy lifestyle behavior changes by including the mothers.

In a pilot study (Newton et al., 2010) in the state of Louisiana, the cafeteria and classroom environments were changed to promote healthy weight loss behaviors for African American students at elementary schools. A dietary and physical activity component that involved the parents being given information about how to change the home environment and promote healthier lifestyle behaviors. Unexpectedly, African American boys maintained body fat while girls saw an increase in body fat (Newton et al., 2010).

School-based programs could be used as a setting for weight loss programs for African American children. It has been posited that community and family connectivity have reduced risk factors in other areas involving youth such as violence (Lim, Zollner, Ajrouch, & Ismail, 2011; St. George & Wilson, 2012). These examples indicate that lifestyle changes must include the entire family as well as the community in which the family lives. School-based programs have been viewed as a positive influence on childhood obesity but most are not continued at home. Unfortunately, healthy food

access is reduced on weekends and during summer months when school is out. Healthier food preparations, foods, and food choices as well as some form of physical activity in schools have been mandated in some areas of Mississippi to combat obesity in children. These mandates are largely directed at school and government entities; these activities often require additional funding. School-based programs that include a family component are seen as positive. Families and children need to be educated with appropriate knowledge for lifelong behavioral changes to be continued.

### **FAITH-BASED FACILITIES**

Faith-Based Settings. Approximately 61% of African Americans attend religious services on a monthly basis (McFatrich, et al., 2013). The literature revealed that faith-based settings also play a major role in the well-being of African Americans (Hoyo et al., 2004; Kim, Linnan, Campbell, Brooks, Koeing, & Wiesen, 2008; McFatrich et al., 2013; Yeary, et al., 2011). Faith leaders believe that parents should role model healthy lifestyle behaviors but also realize that parenting responsibilities can be unhealthy behaviors (McFatrich, et al., 2013). Ideal places for community support and other educational opportunities (i.e. cooking demonstrations, shopping tips) focusing on African Americans are worship and community centers, public housing developments, and other areas where this population typically meets (McFatrich et al., 2013; Sealy, 2010a). Studies have shown that African American faith-communities are an asset to which a record of success in addressing health-related ethnic disparities (Davis, Goldmon, & Coker-Appiah, 2011; Kim et al., 2008; McFatrich et al., 2013).

Churches have been a source of participants for research on obesity interventions tailored to African Americans (Horton, Alvear, & Horton, 2014; Tate, Dillaway, Yarandi, Jones, & Wilson, 2015). Yeary and others (2011) utilized academic and community partners including pastors in focus groups to finalize program materials for a weight loss intervention. This study was useful in developing recruitment strategies and adapting the African American culture and faith to the intervention. The African American church has served as a cultural sanctuary where this population can cultivate or support their culture, be protected from racism, practice their faith, and attend to the social, economic, and health needs of their congregation and community (Kim, Linnan, Campbell, Brooks, Koenig, & Wiesen, 2008; McFatrich et al., 2013; Yeary et al., 2011). A study by Hoyo and others (2004) found that 19 of 21 congregations reported their most prevalent health issue was obesity.

In order to reduce the incidence and prevalence of obesity and its health-related consequences in the African American community, it is a necessary to understand cultural and social beliefs so that appropriately health promotion can begin. Studies have referenced school systems as sites for intervening in weight-loss programs for children but have ignored Sunday school which serves as an integral focus of engagement and commitment for African American youth (Davis, Goldman & Coker-Appiah, 2011). Few studies (Horton, Alvear, & Horton, 2014; Tate et al., 2015) utilize the church setting for weight-reduction programs for African American children and adolescents.

Davis, Goldman, and Coker-Appiah, (2011) used a community-based participatory research approach to examine diet, physical activity, and body image behaviors. They developed an obesity intervention program in a Sunday school setting

for African American children. Multiple themes emerged from the focus groups of children, parents, and church leaders including: integration, family-focused interventions, influences to child health behaviors, communication, strong leadership, and the church as a communal environment (Davis, Goldman & Coker-Appiah, 2011). Barriers that emerged were resistance to change, competing responsibilities, and time restraints within families (Davis, Goldman & Coker-Appiah, 2011).

A qualitative study conducted in cooperation with five African American faith leaders revealed stress related to family responsibilities such as planning meals and a feeling of inadequacy when it comes to asking for assistance (McFatrich, et al., 2013). The faith leaders that participated in this study believed that the church community leaders could help educate their members and promote better lifestyle behaviors (McFatrich, et al., 2013). Kim, Linnan, Campbell, Brooks, Koeing, and Wiesen (2008) used a faith-based weight loss program entitled WORD in a rural African American community to show approximately a three-pound weight loss in the treatment group versus less than a pound in the control group. The program consisted of five focus groups in weekly meetings led by community leaders that were trained on nutrition, physical activity and the participant's faith connection with their health. Similarly, Yeary et al. (2011) showed positive changes in promoting healthier lifestyle behaviors by adapting an evidence-based culturally tailored weight loss intervention in a faith-based church located in the Delta, a rural African American, Mississippi community. Review of literature suggests that collaboration with faith-based institutions is a promising strategy for future interventions.

#### **POLICYMAKERS**

Policy. Policy initiatives at the federal, state, and local levels address the school food environment, however, there is less attention focused on the community and the home environment (Gamble et al., 2012; Reed, 2013; Reed, Dancy, Holm, Wilbur, & Fogg, 2013). These policy initiatives to promote healthy eating are a beginning to policy development however; they lack a focus on minority children and their parents. The federal government and the CDC (2010) stress the importance of increasing availability of fresh fruits and vegetable from sources such as farmer's market and grocery stores. The obesity policy is a part of legislation that bans the use of trans-fat in preparation of food in restaurants and requires most food chains to post calorie-count information (Sealy, 2010a). They are also recommendation regarding portion sizes, marketing practices of foods and foods available in vending machines (CDC, 2009). These federally mandated changes do not strategize changes in minority communities but can be an impetus for food vendors and restaurants to provide healthier foods (Kersh, Stroup, Taylor, 2011; Reed, 2013; Sealy, 2010b).

The National Conference of State Legislatures (2009) compiled legislative options that have been enacted or proposed to promote healthy communities and reduce obesity (Sealy, 2010b). The CDC (2012) has a list of recommended community-based strategies available that stakeholders (i.e. health care professionals, faith-based organizations, community leaders) can use to lobby the local and state government and raise awareness of the magnitude of childhood obesity in low-income communities (Seymour, Yaroch, Serdula, Blanck, & Khan, 2004). An example of state legislation is in New York where a statewide supermarket commission has helped to improve access to

health by promoting foods in inner-city neighborhoods (Sealy, 2010b). As a result of obesity policy legislation, fast food chains are required to post calorie-count in their facilities (Sealy, 2010a). Policy makers have mandated policies for schools to provide healthier meals and snacks with physical education; however, disparities still exist within racial, ethnic, educational and low-socioeconomic statuses (Koh, Blakey, & Roper, 2014).

### Conclusion

The literature reveals that there are multiple challenges to reducing childhood obesity in African Americans. There is a high prevalence of childhood obesity in southern states such as Mississippi, the state with the highest incidence of obesity.

African American parents are highly influenced by the familial culture, beliefs, perceptions, past experiences and knowledge. A cultural aspect among African Americans is the belief that obesity is a genetic condition and there is no cure. There is a preference for the larger body that is viewed in this population as a norm, while the smaller body size is viewed as unhealthy. A family tradition of ethnic cooking includes adding unhealthy seasoning and fat to food for taste, consuming significant amounts of fast food and sweetened beverages all of which contribute to excess weight.

The trend of unhealthy eating and sedentary behaviors appears early and continues through childhood and adolescence to adulthood. Depending on the degree of obesity, children are being diagnosed and treated for adult diseases such as hypertension and diabetes. Childhood obesity is affecting these children's quality of life.

The African American parents do not always perceive their child as having a body weight problem or health issue. Their perception is based on multiple circumstances and

influences such as the child being unable to perform a typical childhood activity or if and when healthcare providers communicate concern in a visit. Parents and family members' body size, low socio-economic level, and low education level are a few of the factors that are associated with parent' perception of body weight. Healthcare providers avoid communicating with parents for several reasons; they have a lack of resources to assist African American families with known barriers. These barriers include unsafe neighborhoods, lack of knowledge (i. e. healthy foods vs unhealthy foods, reading labels) and resources, lack of community support, cultural insensitivity, and mistrust. Lack of access to fresh and healthy foods, absence of convenient grocery stores, and lack of facilities for physical activity are other known barriers to obesity.

Family traditions of unhealthy snacks (i.e. chips, cakes, candy) as a reward, eating while watching television, computers and television in children's bedrooms, constant advertisements of unhealthy foods and snacks, and time constraints where parents are unable to purchase, prepare and eat with family are evident. Therefore, there is no time when structured meals and physical activity can occur as a joint effort. As a result, there is a lack of modeling by the parent for regular physical activity or healthy eating.

This review revealed some studies with African American children and parents in schools, communities, and churches with faith-based centers being the most successful setting for teachings and implementing health programs. Traditional interventions including of eating healthy foods such as fresh fruit and vegetables, regular physical activity, computer and game time are not producing the expected positive outcome in African Americans. There is a lack of culturally appropriate studies of obesity in African American children. These studies are needed to determine why African American

parents fail to recognize and intervene in weight concerns in their children. Stakeholders (community leaders, healthcare providers, schools, & governmental entities) are important entities can influence the epidemic of obesity in the African American family in numerous ways. Specifically, there is a need for funding to support community based programs, acknowledgement of cultural insensitivities, and knowledge, support and treatment from healthcare providers, according to guidelines set forth by the APA and CDC. Multiple studies have referenced race/ethnicity as a disparity and have called for culturally appropriate treatments.

The mandates enacted by Mississippi legislators have schools implementing healthier behavior habits such as diet and nutrition with physical exercise are a start but the incidence of childhood obesity remains high. There is no continuation to high school or to the home milieu where family beliefs and habits are instilled. There is a lack of knowledge about African Americans' perspective on what parents believe will help properly identify their overweight or obese child, change their perception of body weight, identify potential and actual health issues related to weight in their children, change cooking habits, and to pursue healthier lifestyle behaviors and choices.

The next chapter includes the methodology of the research process used in this qualitative, modified ethnographic approached study and details of the focus group sessions. It includes the design study, sampling, measurement information, the process of data collection, data management, and data analysis. This chapter also includes information about IRB and human protection, the study site, and all procedures utilized.

### CHAPTER THREE

### **METHODOLOGY**

The purpose of this study was to understand parental perspectives/perceptions, cultural beliefs, values, behaviors, and factors that contribute to or motivate change in childhood obesity for African American families residing in Mississippi. This chapter presents the research methods employed for this study. The study design, sampling, measurement, data collection, data management, data analysis, human protection, study site, and procedures are discussed. An ethnographic approach was used to achieve the following specific aims:

- Aim 1. To identify the African American parent's perceptions of children and adolescent obesity.
- RQ 1. What is the African American parent's perception of their child's body weight and current health status?
- RQ 2. What is the African American parent's perception of their child's diet and nutrition, physical activity, and screentime?
- Aim 2. To identify motivating factors that African American parents of overweight or obese children believe will be appropriate for change to occur.
- RQ 3. What do African Americans parents identify as facilitators to promote changes in lifestyle behavior in their family to prevent obesity?
- RQ 4. What do African American parents believe will motivate them to change their family's lifestyle habits, practices, and beliefs?

Aim 3. To identify African American parent perceived risk factors that contribute to children and adolescent overweight or obese.

RQ 5. What factors do African American parents believe have most impacted their lifestyle behaviors in relation to their child's weight status? Aim 4. To explore African American parents' perception of how health providers promote healthy lifestyles behaviors.

RQ 6. What do the African American parents perceive as the healthcare provider's role in discussing childhood obesity?

#### The Research Process

There were five phases of the qualitative research process. In the first phase, the researcher begins the complex process of understanding qualitative research and the awareness that ethics and politics play an integral role in research (Denzin & Lincoln, 2011, p. 12). In phase two, the researcher decides on the interpretive paradigm that will guide their study (Denzin & Lincoln, 2011, p. 13). In this study, the researcher used the constructivism paradigm in this study to gain an understanding of the participants' viewpoint and to maintain rigor during the data collection phase (Lincoln, Lynham, & Guba, 2011, p. 102).

Phase three is the research strategy that includes the study's design, purpose, population, settings, and the strategy that will effectively to answer the research questions (Denzin & Lincoln, 2011, p. 14). A modified ethnographic approach was used to outline the direction for connecting the constructivist paradigm to the data collection method, population, site, and interpretive, empirical data (p. 14). Phase four consists of data

collection and analysis. Data collection during this study included five semi-structured focus group interviews, observations, field notes, and recorded data (Denzin & Lincoln, 2011, pp. 12-14). The analysis phase included management and interpretation of data using *NVivo* 11 software, verbatim transcripts of focus group sessions, field notes and peer debriefing. Finally, phase five includes the art, practices, and politics of interpretation and evaluation. The researcher repeatedly reviewed the transcripts, field notes and recordings to interpret the data and used peer debriefing to help in understanding the phenomena under study (Denzin & Lincoln, 2011, pp. 14-15).

# Ethnography

Ethnography is an anthropological approach that seeks to describe the cultural context, beliefs, and ways of life, behaviors, and values of a particular culture (Denzin & Lincoln, 2011; Fetterman, 2010; Spradley, 1979). Humans are the key informant in collecting and analyzing data in qualitative research; therefore, interpretation of their reality is accessed through the observations and interviews (Merriam, 2009). Ethnography is an anthropological approach that seeks to describe the cultural context, beliefs, and values of a particular culture. The goal of ethnography is to authentically report the perspectives and life ways of the study population. Ethnography involves a naturalistic setting and requires one to live in the community observing the day-to-day lives and activities of the community being studied. This study was influenced by ethnography to understand the phenomenon of parental perspectives as they relates to child and adolescent obesity in African American children. African American participants were recruited from similar backgrounds in the same rural community in

central Mississippi. Further, every effort was made to create small focus groups of similar African American parents/caregivers of overweight or obese school-age children and adolescents in order to obtain data about their perspectives, cultural values, traditions, and beliefs concerning the phenomenon of childhood obesity.

Ethnographers use listening, observation, and interviewing as evaluative methods to interpret and describe what people say and do, focusing on predictable patterns of behavior and thought processes as they engage the group's way of life (Fetterman, 2010; Morgan, 1997; Spradley, 1979). In this study, participant observation, field notes, and focus group discussions were used to capture pertinent data not verbalized by participants, happenings during the session, the physical environment, and the researcher's personal thoughts. The researcher recorded observations, documented rich descriptions of the settings, recorded the discussion, and documented group dynamics while the group engaged in conversation. Field notes also documented participant communication after the recorder was turned off as some participants were more talkative during that time.

Ethnographers use multiple evaluation methods to describe and interpret what people say and do while focusing on the predictable patterns of behavior and thought processes as they engage in the group's way of life (Fetterman, 2010; Morgan, 1997; Spradley, 1979). In this study participants were asked questions to acquire pertinent information and visualize the behaviors and modeling exhibited (Denzin & Lincoln, 2011). Additionally, the researcher was able to learn from the participants while interacting with them to acquire data on the phenomenon of the parent's perspective of childhood obesity. Individuals acquire their cultural values by observing, listening,

adapting, mimicking, and making interpretations from the particular group of individuals they are most surrounded by such as family (Spradley, 1979).

Ethnographic researchers must also acknowledge their own biases and be aware of the emic (insider approach) and etic (outsider approach) perspectives in ethnographic research. In this study, the researcher established a relationship with participants, who were African Americans parents of overweight children. Everyone was made to feel comfortable before, during and after the interview, water was available to all participants. However, the role of the researcher was an objective one as the researcher journaled feelings, experiences, and insights in field notes. These perspectives from a naturalistic environment are important in understanding and accurately describing circumstances, conditions, actions, and mannerisms of different cultural groups to explain why they act and think the way they do (Fetterman, 2010; Spradley, 1979).

Another approach to ethnographic research is to investigate the socioeconomic status, demographics related to ethnicity/race and gender, and basic concepts (Fetterman, 2010; Spradley, 1979). This design allowed one for examination of the cultural roots of childhood obesity by exploring the lifestyle behaviors among this population of rural African American families.

## Elements of Rigor in Ethnography

Methodological rigor is required to ensure the trustworthiness of research. Rigor is the means by which integrity and competence are demonstrated in research. The presence of rigor in qualitative research helps assess the value and relevance of the study (Krefting, 1991). Trustworthiness is also used as an indicator of rigor in qualitative

research. The criteria used to measure trustworthiness were credibility, fittingness, auditability, and confirmability (Lincoln & Guba, 1985; Sandelowski, 1986, 1993).

Reliability, in contrast, is not a concept appropriate for qualitative research because of the multiple types of data utilized such as observations, field notes, and interviews.

Credibility. Qualitative researchers use various strategies to increase credibility. Credibility is achieved by describing the informants' experiences clearly (Sandelowski, 1986). Themes were derived from transcripts, thick descriptions in notes and journal; and peer debriefing. This study's focus group sessions included the audio recordings of the sessions which lasted approximately one hour and were audio recorded. Sessions were preceded by approximately 10-15 minutes of conversation during recruitment and eligibility determination with each potential parent/caregiver participant and each child. Member checking was exhibited by the researcher contacting participants to clarify statements made during the interview process. An example of credibility from this study involved adding responses to the transcribed data from three participants for whom a question had been omitted from the interview guide.

Credibility is established when the researcher presents a clear, accurate description and interpretation of the phenomenon as offered by the participants or when other researchers also recognize the experience (Sandelowski, 1986). In this study, observations were documented on the atmosphere of the interview, physical surroundings, participant moods, and other gestures seen in the participants while in the focus group settings of church fellowship halls and hospital conference room (Sandelowski, 1986). Interactions with participants revealed their experiences as they saw them and comprised an assortment of behaviors and interactional responses in a

setting selected by them so that they would feel comfortable. To ensure quality and credibility of this study, peer review and debriefing sessions with other experienced qualitative researchers was useful in interpreting data findings. Transcripts and recordings were verified by two other qualitative researchers.

Fittingness. A qualitative study has met the criterion of applicability/fittingness when readers are able to evaluate the fit between the purpose of the study and the findings of those sampled, findings fit into circumstances outside the study, and findings fit the data (Mackey, 2012; Sandelowski, 1986). In this study the researcher described accurately and in great detail the context of the study to provide a clear picture of the phenomena under study. Peer debriefings were utilized to help combat biases. Thick descriptions and detailed accounts in the audit trail and journal were documented to allow other researchers to decide whether the context is transferable to similar settings or circumstances.

Audiability. Auditability is achieved when other researchers or investigators can follow an audit or decision trial within the study and arrive at comparable decisions (Sandelowski, 1986). While reading the transcripts, the researcher realized that more data was needed for clarification and that this may have caused some participants to change their point of view (Sandelowski, 1993). To ensure auditability in this study, the researcher documented very detailed narratives, clarifications, or rationalizations of every phase of the study. During the data gathering phase of the study, detailed descriptions of the decision-making process regarding the methods, procedures, sampling processes, ethical issues, and data analyses were documented in the journal and field notes. One example of detailed journaling involved the thought process involved for snowballing

when the originally proposed recruitment processes resulted in an unexpected number of potential participants declining enrollment.

Confirmability. "Confirmability is achieved when auditability, truth value, and applicability are established" Sandelowski, 1986, p. 33). Confirmability is evidenced by the use of an audit trail of methodology and decision-making processes during the study (Mackey, 2012). Biases and assumptions must be stated in the beginning of the study so that they are known and do not influence the findings (Fetterman, 2010; Merriam, 2009; Morgan, 1997). During this study, the researcher, as an obese African American, the parent of an obese child, and a family member of numerous obese family members had to separate perceived notions, biases, and reactions from those of the participants during data collection and analysis through the process of journaling her reflections.

The criterion of neutrality refers to interpretation from the findings of the study rather than interpretations based on personal opinions or feelings of the researcher (Sandelowski, 1986). According to Sandelowski (1986), the assurance of confirmability relies on the type of data obtained, data collection methods, study purposes, and type of analysis as well as member checking. In this study, information was discussed with informants during sessions to validate that data interpretation was accurate and neutrality was maintained, the researcher was able to be objective. Furthermore, peer debriefing with faculty and other qualitative researcher was utilized to further clarify the researcher's thoughts regarding the experience.

Lincoln and Guba's (1985) criteria of rigor guided this study; the researcher worked diligently to record every phase of the study's processes with clarification and validation from research participants as well as her dissertation chair and other expert

qualitative researchers. Qualitative research studies should display openness, candidness, and honesty of its participants, observations, data collection, analysis, and findings (Fetterman, 2010; Merriam, 2009; Morgan, 1997). These criteria are displayed in the researcher's journal of occurrences, explanation for decisions, recordings, transcribed data, and field notes.

# Sample and Setting

This research was conducted with a total of five focus group sessions, two were held at churches, one at a community center, and two sessions in a hospital conference room. Four churches were used for recruitment of thirty participants who were parents/caregivers of an African American obese school-age child, 6-19 years of age and their child. The fifteen parent/caregiver participants ages ranged from 26-55, resided in Mississippi and were able to speak, read, and understand English.

### Inclusion and Exclusion Criteria

Inclusion criteria for the parents/caregiver included: a) an African American parent or caregiver with a school-age children and adolescents 6-19 years of age living in Mississippi; b) a parent/caregiver at least 21 years of age; c) a parent/caregiver who is responsible for the child; and d) a parent/caregiver able to speak, read, and understand English. Exclusion criteria included: a) a parent/caregiver with children diagnosed with a condition that contributes to being overweight or obese; b) parent/caregiver with children prescribed medication that cause weight gain; c) a parent/caregiver of pregnant children or those that have given birth; and d) households with a parent or child that is cognitively impaired.

### Protection of Human Subjects

Approval for this study was obtained October 5, 2015 from the University of Alabama at Birmingham Institutional Review Board (IRB) for the Protection of Human Subjects (Appendix A). Approval was given for study, protocol #X150821003, from October 5, 2015 until October 4, 2016. Renewal was obtained from IRB on September 21, 2016. Consent form clearly stated that each participant could withdraw at any time. The researcher met with all potential participants, explained the study and obtained consent to participate from the parents (Appendix B). Assent was obtained from each child to obtain weight and height (Appendix C). Codes were given to each informant to assure anonymity and all documents including field notes utilized the code names and contain no unique identifying information regarding the informants or their family members. Signed consent forms, demographic forms, field notes, digital voice recorder, and transcripts were transported in a locked briefcase and stored in a secured cabinet in the researcher's office. The transcriptionist was instructed to maintain confidentiality during and after the transcription process, although, no participants' names were on the recordings.

There were no known risks associated with participating in this study, although the participants may felt some awkwardness when talking. There appeared to be no risk of confidentiality lost in the group session. Everyone appeared pleasant and courtal with each other. They were told to feel free to share any questions or concerns with the researcher before, during, or after the group discussion. No one voiced any concerns. There were no benefits directly from participating in this study. Participants were told

that any information learned from the discussions may help other people in the future and each received a \$10 Walmart gift card purchased by the researcher for their participation.

#### **Data Collection Methods**

#### Recruitment

The recruitment process began after a letter of information (Appendix D) was sent to the leader/pastor of each of four Mississippi churches and their governing bodies asking permission to speak with the congregation and/or post an announcement in the organization's program/bulletin. These four facilities were chosen based on the researcher's prior relationship as a church secretary in the community. The researcher was available to meet with pastor and appropriate deacons and/or members of their congregation to answer questions as needed. Recruitment began by meeting with the person responsible for the bulletin board and creating the Sunday church bulletin at each church. Flyers (Appendix E) were placed on the bulletin boards and inside Sunday church bulletins. The researcher attended faith-based meetings and religious services after the announcement was made available to potential participants. Flyers and announcements were presented at all facilities approximately one -to- two weeks before proposed focus group session.

Either a second visit was made or a follow-up announcement was sent to the facilities to help promote recruitment. On occasion, the researcher approached some parents/caregivers to ask if they would participate in the study and handed them flyers personally. Other participants were recruited through snowballing in which participants were asked to refer the researcher to other potential participants for the study.

#### Data Collection Tools/Instruments

Sociodemographic Form. At the initial meeting, the potential participants were asked to complete a sociodemographic questionnaire (Appendix F). The researcher-generated questionnaire asked about the gender, age, education level, family income, and child's perceived weight.

Interview Guide. An interview guide (Appendix G) of open-ended questions was used to facilitate the focus group discussions. These guided questions assisted the researcher in gathering effective data from participants. The questions asked about the parent's perception of body weight, health, and motivating factors related to changing their child's obesity status.

Height and Weight of Children. Parents were asked their perception of their child's weight. The child's height and weight were obtained at the initial meeting with the parent(s), if child was present. If child was not present, height and weight was obtained before the focus group meeting and not disclosed to parents until after their perception had been documented. However, none of the parents asked for their child's body weight status.

The actual height and weight of each child was obtained and the researcher determined the body mass index (BMI) using the standard calculation BMI = weight (lbs) x 703  $\div height$  (inches)<sup>2</sup> then by using the CDC's BMI Calculator for Child and Teen (<a href="https://need.cdc.gov/dmpabmi/calculator.aspx">https://need.cdc.gov/dmpabmi/calculator.aspx</a>, CDC, 2000). Potential parents/caregivers were told at this time whether or not they meet the eligibility criteria for study.

The researcher purchased a digital scale and tape measure for use in the study.

The scale was calibrated according to instructions and double-checked for accuracy with

the use of two five-pound weights. The scale was calibrated to zero before each child's weight. Participants were weighed in light clothing and asked to remove their shoes. The child stood with both feet in the center of the scale and weight was recorded to the nearest tenth of an inch. The researcher weighed each child.

Height measurements were taken on flooring that was not carpeted and against a flat surface such as a wall. The researcher taped a sheet of white 8 1/2 X 14 piece of paper on the wall with non-stick tape to mark heights. A plastic or paper tape measure was taped alongside the paper on the wall 24 inches from the base on the floor in case the child was taller than the 60 inches noted on the tape measure. Therefore, 24 inches were added to the measurement on the tape measurement to accommodate those children over 60 inches-tall for accurate height. The same tape measure was used for all height measurements. The child stood with feet flat, together, and against the wall. Also, the child's head, shoulders, buttocks, and heels touched the wall. A flat, hardbound book or ruler served as a headpiece to form a right angle with the wall and it was lowered until it firmly touched the crown of the head. The researcher lightly marked where the headpiece met the wall to accurately record the height to the nearest one-eighth inch or 0.1 centimeter. Heights and weights were used to determine body weight percentile and BMI. In order to provide privacy and ensure confidentiality, the researcher asked the faith-based facilities for a closed room to talk with potential participants and to obtain the child's measurements. All meetings occurred before other faith-based activities, at other scheduled times at the faith-based facilities, or prior to focus group sessions.

## Focus Groups

Five focus group sessions were conducted to capitalize on communication among and between participants by engaging each other in conversation, asking questions, exchanging anecdotes and commenting on each other's experiences and points of view (Fetterman, 2010; Spradley, 1979). This technique allowed the researcher the opportunity to explore the participants' knowledge and experiences and to examine not only what people think but how they think and why they think that way regarding the phenomenon of childhood obesity in African Americans (Knoblauch, 2005). Therefore, utilizing focus groups helped understand the perception, experiences, challenges, and thought processes of obese children's parents through their perspective. The researcher utilized focus group interview sessions to answer research questions associated with this study. The focus groups helped the researcher understand the characteristics and underpinnings of the culture that influences health practices of African American children related to diet and nutrition, physical activity level, and sedentary lifestyle behaviors.

Focus group sessions were used instead of an individual interview session to observe group interaction. In the group session, participants could hear everyone else's answers and make additional comments or ask questions for clarification. The participants were able to communicate with each other on a topic of similar concern with individuals that they did not know. A focus group session was appropriate for understanding the cultural beliefs, values, and attitudes of a group of African Americans participants.

The focus group sessions were an effective and efficient manner to retrieve information from several participants with similar backgrounds or characteristics (i.e. age, gender, or race/ethnicity) in a, non-judgmental or threatening setting (Kitziner, 1995; Morgan, 1997). Each group had three members of the Baptist faith, and each attended one of the churches where recruitment occurred. The groups included African American parents of children that were overweight or obese and had varied age groups (6-19 for children; 26-55 for parents), education, and income levels. The parents did not have to be overweight or obese. All the focus group sessions included members that did not know each other and two groups had members from the same faith-based church.

One potential disadvantage of naturally occurring groups such as those from the same church is the potential for fragmented observations (Kitzinger, 1995), while an advantage would be the participants could easily relate to each other's comments because of their shared life experiences. There were some participants that appeared to dominate the conversation in two of the sessions so the researcher attempted to engage the entire group with some success. The passive members agreed with comments by dominant members but only answered when asked a direct question or when acknowledged by the researcher.

Some of the focus group sessions in this study were rescheduled for convenience of the participants. An example of rescheduling occurred when only two of the five participants scheduled for the first focus group in the conference room of the local hospital were present therefore. The session was rescheduled until more participants were able to attend. Participants provided multiple reasons for not attending their scheduled session such as previous appointments running late, forgetting, or some just

did not appear at the scheduled time and gave no excuse. The researcher was able to observe and document dominate cultural values, common and shared knowledge, and group norms while participants discussed their perspective on childhood obesity.

Focus group sessions were scheduled at different times to accommodate participants as much as possible. According to Kitzinger (1995, p. 301), group settings "should be relaxed: a comfortable setting, refreshments ...help establish the right atmosphere". The settings were comfortable, accessible, and easy to locate. The three settings utilized for focus group sessions were a church's fellowship hall, a local hospital conference room, and a neighborhood community center. The different schedules and settings were available to better fit the convenience of the participants. The researcher discussed any scheduling conflicts at the time so that there were equal numbers of participants at each session. The researcher did not schedule focus group sessions on days when other activities were in close proximity of meeting rooms. Each session lasted approximately one hour.

After the researcher met with potential participants, they were scheduled for one of the focus group session that best fit the date, time, and place that was most convenient for them. At the beginning of each focus group session, a brief overview of the study including the study purpose, recording explanation, confidentiality, and any other instructions were given. The researcher answered any questions participants had at that time and the informed consent and child assent, and verbal consent to be audio-taped were obtained. Each participant was reminded that they could withdraw from study at any time. Finally, each person was given their code number/letter combination that

related to the session they participated in for the purpose of confidentiality and identification.

Audio recording the semi-structured interview session began when the group was asked the first open-ended question from interview guide. The researcher allowed participants to think about the question and respond while observing group dynamics. The researcher did ask clarification questions during the interview when needed. If participants tended to deviate from the purpose and/or questions being asked, the researcher attempted to use strategies to bring them back to study focus or the question at hand. The researcher did not interrupt groups that rambled off topic, allowing participants to finish their thoughts and views. Afterwards, they were refocused back to study question. The researcher observed and listened attentively for words or phrases that were similar for changes in tone, emotions, and behavior habits as participants interacted with each other, as these are indicative of attitudes and feelings (Fetterman, 2010). The researcher also observed for fidgeting, nervousness, or a sense of uneasiness to determine if the participants were comfortably discussing the topic. The researcher also used positivity such as a handshake with good eye contact, pleasant and calm atmosphere, and a positive upbeat voice to ease comfort level. The researcher continued focus group recruitment and interviews until data saturation demonstrated by the same information heard consistently with no new information being collected (Merriam, 2009; Marshall & Rossman, 2011).

After each interview session, the researcher ended the session by thanking participants and giving each participant an incentive of a \$10 Wal-Mart gift card. Bottled water was available during the interview sessions. At the conclusion of the focus group

session, the researcher wrote field notes about observations and behaviors seen. The digital recorder and other documents (i.e. field notes, consents) were placed in locked briefcase for transportation back to researcher's office where recorded sessions were downloaded to a password protected computer.

### Data Management and Analysis

### Data Management

A digital voice recorder was used by the researcher in this study to engage in lengthy interviews without distraction; therefore, a natural conversation occurred (Fetterman, 2010; Morgan, 1997). All digital recordings were saved as mp3 files and stored to a password protected computer hard drive. Verbatim transcriptions were made of all recordings and stored with the recordings, diaries, and other documents on an encrypted jump drive.

Documents and data used for analysis were stored in a password protected database for analysis in the researcher's office. Clarification and verification of data were needed and obtained from some participants after transcription. Thus, participant contact numbers, identified only by the participant's unique code were obtained. The code sheet was kept separately from all other documentation to prevent identification. The recordings were transcribed into a Microsoft Word© document by an experienced transcriptionist hired by the researcher and then placed on an encrypted jump drive. The transcriptionist was familiar with the English dialect, and slang used by participants. Therefore, no changes in transcripts were made to the dialect or slang used by participants. The transcriptionist was informed and consented to maintain confidentiality

although no names were used. After data were transcribed, the researcher reviewed recording and transcribed data for accuracy. Any necessary corrections were made on the transcripts by the researcher. After corrections from recordings were made on transcripts, some participants were called for clarifications. Any clarifications required from participants were done via phone conversation to ensure credibility. These corrections were then added to transcripts.

### Data Analysis

Data analysis was a continuous process where the researcher was immersed in the data. Field notes, personal notes, observations, and transcripts were used to assist in analyzing the data. This analysis process was time-intensive and included data organization, category scheme development, importation of data into a computer analysis program, and thematic analysis.

The transcripts were converted to portable document format (PDF) and uploaded into *NVivo* 11. *NVivo* 11 is a qualitative data analysis software program that assists with capturing, organizing, and analyzing unstructured data (QSR International, 2012). After transcripts were uploaded, the researcher read through and reviewed all transcripts for pertinent phrases and assigned them a node or theme name based on the interview questions. Nodes are referred to as themes in the *NVivo* software. During this process, the researcher realized that several phrases could be placed under one or more nodes. Theme recoding occurred based on recurrent nodes as transcripts were continuously reviewed. Phrases and quotes were constantly pulled from transcripts and assigned to a node or placed in an existing node/theme. Data continued to be analyzed for behavioral patterns, customs, the participants' way of life, the natives' view point, emotions, values,

and the participants' description of self. Themes were reviewed and similar themes were grouped together. The themes, referenced phrases, and transcripts were reviewed numerous times by the researcher. Nodes and/or references were added or deleted as needed throughout the process. The researcher hand-wrote and typed out categorical notes and later compiled them in a table-format for display with supporting references from transcripts to show validation of why this item was selected for a certain category.

The next step included taking identified themes and correlating them with the proposed research questions. A working Microsoft Excel® spreadsheet was created with each research question and supporting theme and quotes were placed under each question. The researcher searched for key words that could be clustered together.

Afterwards, the researcher reviewed quotes and research questions and compiled the final themes.

During this process, peer debriefing meetings with an expert researcher occurred through face to face, phone and email conversation. Validation of themes with statements from the transcribed data were reviewed in the debriefings. The process and feelings that the researcher used to make decisions was documented in an audit trial of the analysis process to further discuss, clarify, and validate stages of the analysis process to assure trustworthiness of the analysis.

After consensus was made regarding themes, a flow of inter-relationships among the themes to childhood obesity among African Americans was displayed. To maintain and ensure auditability, the analysis process was documented continuously throughout the process. Forms with identifying information such as consent forms, code sheet, and socio-demographic forms will be destroyed after five years. Recordings and transcripts

will be kept in locked file cabinet at researcher's locked office for future use and dissemination. This data will be converted to mp3 files and stored on a compact disc.

### Summary

This ethnographic study utilized focus groups and the constructivist paradigm, to understand the perceptions of African American parents of overweight or obese children. After IRB approval, recruitment of African American parents of obese children from faith-based communities began. Permission was obtained from church leaders. After flyers were posted in fellowship hall and placed in church bulletins, the researcher met with potential participants. The researcher gave an overview of research and obtained informed consent. Afterwards, focus groups were scheduled. Focus group sessions were held at a church, local hospital, and community center locations in a rural Southern town. The focus group sessions were audiotaped and field notes were recorded during the sessions in this study to assist in creating rich description and accurately document the research process.

Data analysis was ongoing and initiated after transcripts were reviewed for accuracy from digital recordings. Data collection included digital voice recordings, transcripts, field notes, observations, listening, adapting, and interpretation. The use of *NVivo* 11 analysis software helped breakdown transcribed data into nodes, themes, and workable data. This was an in-depth process requiring totally immersion in the data. After themes were validated with quotes from the transcribed data, field notes, and observations, peer debriefing occurred during the analysis process. The research questions were reviewed and validated with data from transcripts, software, field notes,

and observations. Documentations of processes, emotions, and reasoning were an ongoing process.

The next chapter four talks about the findings from the data collected from the focus group sessions with African American participants living in Mississippi. Chapter four presents descriptions of the settings and the population sample used in this study. This qualitative study used a modified ethnographic approach and focus group sessions to collect the data on the parent's perspective of African American children and adolescent obesity.

#### CHAPTER FOUR

### **FINDINGS**

The purpose of this study was to understand parental perspectives/perceptions, cultural beliefs, values, behaviors, and factors that contribute to childhood obesity and motivating criteria to change to healthy lifestyle behaviors in African American families residing in Mississippi. This chapter will present findings to include thick descriptions of the settings and the sample population of this qualitative study using an ethnographically influenced focus group approach to explore and understand the phenomenon of childhood obesity in the African American population.

Themes that were similar in all focus group sessions were habits, belief system, familial influences, and practices of this culture. These were condensed into four categories: denial or false perception; culture and traditions; time and convenience; and finances/cost. Peer debriefing by other qualitative researchers occurred during the data analysis and interpretation process of this study. An audit trail was used to record the analysis process. In this chapter, the reader is guided through the six research questions. The data are then discussed according to the themes that emerged.

## Settings

This research study occurred in a rural town in central Mississippi. This rural, tourist and retirement town, has numerous employment opportunities including four casinos, two federal government agencies, several industrial plants, a nearby energy

plant, a military park, a community college, public and private schools. The town has approximately 168 faith-based churches of various denominations and ethnicities.

Approximately half of the churches are predominately African American and participants from this study were recruited from four churches in this pool.

Focus group sessions were conducted at a local church, community center, and a conference room at one local hospital. The participants were given a choice of which facility to attend. There was a total of five focus group sessions, two were held at the church, one at the church community center, and two sessions took place in the hospital conference room. Eligible participants who were parents/caregivers of an African American school-age children and adolescents, 6-19 years of age living in Mississippi were recruited from four churches. Parent/caregivers were required to be at least 21 years of age, responsible for the child, able to speak, read, and understand English. *Faith-Based Facilities* 

Churches. Church A, a new facility with approximately 350 congregants, was located in the northern area of town, off a main intersection within the city limits in this rural town. The location is on a two-lane street behind a convenience store/gas station in a low socioeconomic neighborhood. The church consisted of two adjoining brick buildings with a playground for its members on the left side of building one. One building housed the sanctuary and the other building housed the fellowship hall, classrooms, and offices. There are two black metal gates used to gain entrance into the parking lots.

Immediately to the right of the faith-based facility are low-income apartment buildings for the elderly. To the right of the apartments are low-income apartments for

single adults and their children. There are wooded areas across from all of the facilities. Traveling past the low-income apartments, one enters into a community of single and family homes with residence based on income. The single-family homes are all identical in appearance and makeup. All of the apartments and homes for low-income residents are property of the city's housing authority. The majority of families living in these apartments and homes are African Americans.

Church B, with approximately 110 congregants is an older facility centrally located within the city limits in an African American neighborhood. The facility was a two-story red brick building on a hill that houses the sanctuary on the main floor and fellowship hall with bathrooms on the basement level. There are multiple concrete steps leading to a porch. Entrance to the facility is through the center's two double doors but through the left side-door.

This church has services twice a month on second and fourth Sundays but has weekly Sunday school and Bible study. Since there is no parking lot; members park on the side streets. The church is in the middle of a three-way intersection that connects three streets with houses on both sides of each street. A couple of houses are well-kept with grass neatly cut, other houses are occupied but in need of repairs, most are abandoned with trash in unkempt yards. The neighborhood includes both home owners and renters.

Church C, a fairly new facility, is also located in the southern region of the town on a major road that runs the width of the town but changes names at different bends of the road. It is located in the county where the main road ends and splits into two separate roads. At the center of the intersection is a used car lot. This facility is located down a

hillside from the road with a beautiful landscaped yard with a concrete driveway where members enter on the right side of the building and exit on the left side. There are parking lots on both sides of the building and the back of the building; handicap parking is available on both sides of the building. There is a cemetery directly behind the backparking lot. This building has a sanctuary and a fellowship hall with offices and classrooms, outside there is a playground and basketball goal for the children. This facility's congregation is also predominately African American.

Entrance to Church C can be made through the front two double-doors or on either side of the facility. On the right of this facility is a brick family home with old cars and a tractor on the acreage. On the left side of the facility within view is a family trailer where children are frequently in the yard. Both yards appear unkempt or have patches of dirt as well as landscaped areas. There appears to be wood and equipment in the yards and on the sides of their graveled driveways. Across the street from the church is lodge property with a building and parking lot behind a gated entrance.

Church C allowed the researcher and focus group to use their fellowship hall on two occasions. The sessions were conducted on Sunday evenings after all the other church activities were completed to allow for group privacy. A convenience store is located within a mile of the facility but the nearest grocery store is nearly three miles away. The only transportation for persons living in this rural area is by private vehicle. There are no buses, taxis, or other means of transportation in this area.

Church D is located in the eastern region of the town in the county close to an interstate highway. The church is located in the bend in the road and is a newly renovated brick building that houses a sanctuary, offices, and classrooms. Entrance to the

facility can be made through the two double-doors at the front of the building or on either side toward the back of the building.

There is a concrete driveway surrounding the building but the road surrounding the building is composed of graveled rocks. The gravel road behind the facility leads to mobile homes. Immediately behind one area of the church is a deer processing company and there is a community center across the street. The congregation, comprised of approximately 150 members, is solely African American.

The community center is an older building where entrance can be gained through either a small screened outdoor foyer leading to the front door or on the side of the building. The building has a large open space with elongated tables in two rows with folding chairs at the tables. There is a kitchen in the back of the facility and bathrooms to the right of the kitchen. There is an additional door at the back of the kitchen. One focus group session was held at the center in the evening when no other activities were scheduled.

There is a convenience/grocery/service station within 100 feet of the center and church. The store does not sell fresh fruits and vegetables but canned items with only a few fresh steaks, packages of hamburger meat and packages of luncheon meats. The store houses a Subway outlet and sells ready-made pizzas. This store also serves as a gas station for private vehicles as well as truckers from the highway. The nearest larger grocery store is approximately eight miles away. This is the only "grocery store" to which many local residents have access. The only transportation available in this area is by private vehicle.

## The Hospital Conference Room

The hospital conference rooms used were located in the northern section of the town in the only acute care hospital in the city and county. The next acute care hospital is 40 miles away. There is a convenience store within a mile of the facility but the nearest grocery store is at least four miles away. The focus group sessions occurred in one of the four conference rooms when no other activities were scheduled.

The conference room is large and can be partitioned off into four smaller rooms.

The conference room was set up with long conference tables with cushion chairs, a

podium in the room, and the conference rooms were out of the flow of hospital traffic.

Two sessions were held in the evening to preclude scheduling conflicts.

The hospital is located off an interstate highway at a four-way intersection in the county. This intersection has a bank and an elementary school on the opposite corners across from the hospital and clinic. On the side of the road, a man frequently sells fresh fruit and vegetables (tomatoes, peaches, watermelons, peas, butterbeans, and greens) out of his pickup truck.

## **Grocery Stores**

There are five grocery stores located within a six-mile radius of this rural town. According to the 2010 U. S. Census Bureau (2010a), the county consists of approximately 589 square miles of land and 30 square miles of water. There are two main grocery store chains in the area which are less than a mile apart. Each sells a multitude of fresh fruits and vegetables and other groceries at reasonable prices. The other three stores sell fruits and vegetables but they are not always fresh. These stores also have an odor from old or rotten foods, outdated canned goods, discolored meats, etc.

They have processed foods at discounted or sale prices and are located in areas where persons living close by could walk or use public transportation. Weekly sales were noted at all grocery stores except one which has sales about twice a month.

Grocery store No. 1. Grocery store number one is within walking distance for customers and is located off the interstate and on a main four-lane street that takes one into the downtown area of this rural town. This grocery store has been in business for approximately twenty years. The grocery baskets located outside of the store on the right side of the door entrance, are rusty and old damaged tires that make them difficult to push. On entrance to the building, there is an odor of old food. Proceeding to the right, food items displayed on the walls and down the center included sugar-cereals, hot sauce, canned goods, and other store-branded items that are on sale for the week. The sweetened cereals were positioned at eye level and the on the floor while the healthier cereals were located high on the shelf. Shoppers proceed on the right where the food items are displayed on walls include old fruit and vegetables. When employees were asked about fresher produce, the researcher was told "the truck comes on Wednesdays". The floors are crowded with foods and other items, not waxed and shiny, they are covered with old stains, dirt, and black smudge marks. There are expired canned vegetables on display as sale items. There are noticeable tiny bugs/insects flying over the fruits and vegetables with odor. There is an enormous supply of sodas on the floor priced at 4 for a \$1.00. There are also packaged meats such as wieners, sausage, chicken, neck bones, ham hocks, pig feet, pork chops, and ground meat that are routinely sold as a pick-5 for \$20. These same meats ranged anywhere from \$3.88 to \$5.24 each prior to sale.

Similar displays are seen on the cracker and cookie aisles. This store also sells cigarettes and money orders.

The grocery store was located on one corner. On the other three corners, there were a private faith-based school, an African American funeral home and a parts-supply store. There was a road between the parts-supply store and funeral home that leads to the one-way entrance and exit of low-income single-family apartments where the majority of the occupants were African Americans. On the right side of the grocery was a small strip mall which includes a nail shop and a tax preparation business. There was a small ethnic restaurant that is in the center of the parking lot that sells predominately fried foods (chicken, fish, French fries) with a sugar-sweetened punch. Meals can be purchased for less than \$10. This block also includes a dollar store, family-owned pharmacy, chain pharmacy, a vacant building, a total of three auto supply stores, and a parking lot where a street vendor occasionally sit and sells items from the back of a pick-up truck (fresh greens, socks, and other items).

Grocery No. 2 and 3. Grocery store number two is located directly off the interstate on the frontage road as part of a small strip mall that includes a carry out pizza restaurant, tobacco store, income tax preparation office, nail shop, chain pharmacy/store, dry-cleaners, flower shop, and a non-chain pharmacy. This grocery store has a deli and an area that prepares and sells cooked meals for breakfast and lunch daily. These meals consist of an entrée and two vegetables with bread for approximately \$8.00. The grocery store also has a bakery. This store carries fresh fruits and vegetables, frozen foods, canned goods, etc. Most of the meats are fresh and this store participates in pick-five meat specials.

Grocery store number three is located in the county. It has regular specials of sugary beverages, processed foods, quick-fix meals, etc. that attract low-income persons. The store carries a variety of reduced priced chips, pork skins, and candies located near the cash registers at eye level and below. The store is crowded with foods and supplies making it difficult to maneuver in the store aisle with a basket. There is a gas station attached to the grocery store and a strip mall with a paint shop and a flooring store across the parking lot. This grocery store has been open for several years and is in need of painting, new grocery carts, and a paved parking lot.

Grocery No. 4 and 5. Grocery stores number four and number five were both chain grocery stores. These stores were within a mile of each other on a busy boulevard in the heart of the city. The town's only shopping mall was located on the same boulevard as well as a multitude of fast food restaurants, hotel chains, gas stations, convenience stores, and other businesses. Both of these stores are busy most of the time and both consistently carry fresh fruits and vegetables, fresh meats and seafood, and a healthy food selection of organic foods.

Grocery store number four is located at the right of the boulevard at the middle of three intersections before the mall entrance. This new store is larger than the previous stores with designated departments such as the deli which serves deli meats and cheeses, hot meals, sushi, salad bar, and a bakery. The store also includes a florist section and pharmacy with drive through. This store has weekly food sale items similar to the other.

The second chain grocery store is located at an intersection at the end of the boulevard and crosses an interstate highway. This is a combination department store, pharmacy, and grocery with a Subway restaurant in the store. The store has a wide

variety of fresh fruits and vegetables and a multitude of healthy options. There is also a variety of exercise equipment and supplies available for purchase. A fast food restaurant is located in the same area across the street from a convenience store which houses a pizza restaurant. There are three strip malls: one on each side of grocery/department store and one beside the fast food restaurant. The strip mall stores include clothing stores, shoe stores, jewelry stores, a liquor store, a dollar store, an office supply store, an ethnic restaurant, etc.

#### Convenience Stores

Three of the convenience stores (one near a health-care facility, one near the hospital, and the other by the community center) are a local family owned chain that carries onions, lettuce, and potatoes as the only fruits and vegetables. They cook and sell fried chicken, potato logs, chicken-on-a-stick, chicken biscuits, and other fried foods during the day. These items are discounted in the afternoon daily. These stores sell canned goods and others foods that would be purchased in a grocery store but at smaller quantities. The convenience stores are only source of food shopping for some local residents. All of these convenience stores also serve as service stations.

### The Sample

The researcher met with all potential participants. At the initial meeting, potential participants were given an overview of the study and informed that the study would be composed of an interview session within a focus group of approximately three to five participants. The participants were also told that the interviews would be recorded, last approximately 90 minutes to two hours and that they would be compensated for their

time. All participants agreeing to participate in the study were given a copy of the consent form which included the contact number for University of Alabama at Birmingham's IRB to call with questions or concerns. The participants were also informed that they could withdraw from the study at any time.

A purposive sample of African American parents and/or caregivers of 6 to 19year old overweight or obese school children were recruited for the study from
predominantly African American faith-based organizations. Parents/caregivers were
asked their perception of their child's body weight status on the sociodemographic form
(Appendix F) categorizing their child as either overweight or obese. The parent/caregiver
put a check mark on the line next to the category that they perceived their child's body
weight fits. The researcher then measured the child's weight and height, and the child's
actual weight status was compared to parents/caregivers' perception. During the focus
groups, parents/caregivers were able to give their viewpoint about the phenomenon of
childhood obesity in a, non-threatening setting. Homogeneous sampling was also a
strategy of purposive sampling that was utilized to recruit African American participants
who believe their offspring are overweight.

A total of 15 school-aged children and adolescents aged 6-19 and 15 of their parents and/or caregivers participated in this study. The children and adolescents were participants for measurement purposes only. Descriptive data were obtained using a sociodemographic form (Appendix F) and are presented in Table 1. The caregivers in this study were all female with an age range from 26-55 years of age. All caregivers except two were the child's biological parent. Only two of the caregivers reported being single, while nine were married, two separated and two divorced. Thirteen of the caregivers

were educated beyond high school with six having advanced degrees. This high level of education is not the norm for this rural town. Eighty percent of the caregivers had full-time jobs with the majority reporting an annual household income of at least \$50,000 or more which is also not typical for the town.

There were nine male and six female children. The weight status of all the children placed them in the obese category with a BMI range of 22.0-46.4. All of the children actual body weight measurements placed them in the obese category. The children were seen at different times either at the arranged time or just prior to the focus group session with their parent/caregiver. After assent was obtained and measurements taken, the children left the premises with other family members and were never in the room during the focus group sessions. This meeting was to assure that the prospective participants met the inclusion and exclusion criteria. The parents/caregivers and their children were usually well-groomed (hair combed) and dressed in casual, clean clothes. Most of the children wore gym shoes. The children appeared to be well-mannered and acted appropriately while being measured.

Table 1
Sociodemographic Characteristics of Sample

Characteristic	Frequency	Percentage
Age of Parent (n=15)		
21-29	2	13.30
30-39	2	13.30
40-49	10	66.70
50-55	1	6.70
Parent/Caregiver Status		
Never Married	2	13.30
Married	9	60.00
Separated	2	13.30
Divorced	2	13.30
Parent/Caregiver Education Level		
High school/GED	2	13.30
Some college	3	20.00
College Degree	4	26.70
Post-graduate Degree	6	40.00
Parent/Caregiver Occupation Status		
Homemaker	1	6.70
Disabled	1	6.70
Full-time Employed	12	80.00
Part-time Employed	1	6.70
Household Income		
Less than \$20,000	3	20.00
\$20,000-49,999	2	13.30
\$50,000-99,999	6	40.00
\$100,000 or more	4	26.70
Age of Child (n=15)		
6-10	5	33.30
11-15	6	40.00
16-19	5	26.70
Parent's Perceived Child's Weight		
Status		
Overweight	10	66.70
Obese	5	33.30
Child's Actual Weight Status		
Obese	15	100.00

## Findings Related to Research Questions

Question No. 1: What is the parent's perception of their child's body weight and current health status?

This question was assessed by the participant's responses on the sociodemographic sheet (see Appendix) to the question about their child's weight status. During the focus group, interview guide questions that asked about the parent's perception of a healthy child and their decision-making capabilities about whether or not their child is overweight. The participants were also asked questions about their decision-making process as it related to whether their child was healthy or not, how lifestyle behaviors affected the child's body weight and what the participants believed to be their role while conversing with their child's healthcare provider.

Parent's Perception of Body Weight. Study inclusion criteria specified that participating parents must perceive their child to be overweight or obese. However, only five participants were able to accurately identify their child as obese, while the other ten participants incorrectly identified their obese child as overweight rather than obese. Some believed their child was only a "little overweight" or just "big boned" rather than overweight or obese based on BMI or "stats" as referred to by the participants. Although the researcher approached other potential participants at the faith based facilities, some participants stated they did not want to put the "stigma" on their child by labeling them as overweight or obese. Other potential participants approached by the researcher received the flyer with contact information but did not the contact the researcher.

Parent's Perception of Health Status. Most participants believed that their child's body weight was not an issue because the child's healthcare provider never made aware of any health problems or issues. Participants repeatedly stated the dependence on the healthcare providers to tell them if their child was overweight or obese. One individual stated, "doctor's gonna tell you when they do their body weight and stuff". Some participants were concerned about their child's body weight but were not concern about the child's health because "my child does not have any health concerns".

In reference to the question related to the parents/caregivers' perception of their child's health status, every focus group participant relied on the healthcare provider to tell them if their child was overweight or not. None of the participants mentioned that they had initiated a conversation with their child's healthcare provider regarding the child's body weight. They did, however, state that when the healthcare provider mentioned a potential issue related to the child's weight status; it was only that the child needed to lose weight. One participant responded about comments from her child's healthcare provider saying "He's been to the doctor and they said the only thing he need to do is lose some weight before you do have problems".

According to the parent participants in this study, only one child had been diagnosed with a chronic health problems (hypertension and anxiety). Another participant was concerned about her child's body weight because the healthcare provider mentioned that the child should maintain his weight especially since there was a family history of chronic illnesses (hypertension and diabetes). This same participant stated "Because of the history in my family with diabetes and high blood pressure, I am more concerned now to try to do something to help him slim down". Other participants

mentioned that their children also had some diagnostic testing for chronic disorders such as "glucose testing", "cholesterol", and "the doctor wanted to test her for diabetes...she ended up not being diabetic...but wanted to watch her weight to make sure it doesn't ...become a risk". Some participants were concerned with health issues based on family history one stated

"...we tend to be overweight in my family and we do have health issues as a result of it" and another stated "...because of his family history...I know with his dad having diabetes as bad as he does that he's more at a risk of diabetes the more he weighs".

One participant was not concerned for her child's health based on her husband's obesity stating,

I guess actually I really don't because when I think about my husband who is very, very overweight...he has no health problems...doctor said the only thing he need to do is lose some weight before you do have problems.

Some participants were not concerned because they felt like if it was an issue the "doctor will tell us". Others stated they would be concerned about their child's weight status and health only if "the child is unable to do some activities or getting short of breath..." or another stated "I look for shortness of breath, sleeping problems, inactivity or just a problem with normal activities".

In summary, the participants' children routinely visited a healthcare provider who evaluated their child. Based on the participants' reports none of the healthcare providers informed the participants that their child was actually obese. The parents did not believe their children's weight affects their health status, although many had a family history of

chronic health. As long as the children were able to engage in their activities, their health status was not a concern to the participants. Here, they reiterated that if their child had a problem the healthcare provider would let them know. Only one child was on medications for a chronic disorder and the parent attributed her hypertension to anxiety rather than her weight because she was active. Another parent mentioned that being overweight did not mean one was unhealthy as she compared her husband's body weight and his health status to their child.

*Question No.* 2: What is the African American parent's perception of lifestyle behaviors such as diet and nutrition, physical activity, and screen time activities?

Diet and Nutrition. This question was evaluated using interview guide questions about healthy diet and nutrition, physical activity, and screen time behaviors (see Appendix). Parents provided similar comments when they were asked about a healthy diet. Some participants believed a healthy diet included, "vegetables...grilled foods, not fried...baked, broiled, or steamed", "anything but fried food, sweets and starches", "a healthy diet...lots of vegetables and meat", "it should be baked", "baked chicken, fish, poultry, lean meat" and "lots of green vegetables and fresh fruit". Some commented specifically about certain foods that needed to be avoided such as "I just don't want them eating a lot of junk food...so as long as they're not eating chips and cookies and drink sodas." For another, a healthy diet was explained as ".... chicken, fish, and shrimp: broiled or grilled, salad and vegetables".

When asked about unhealthy behaviors, comparable statements were made such as "eating fried foods, fast foods, watching television while eating chips and popcorn..."

and "not exercising". Others commented that, "we don't prepare meals ahead of time" and "we just eat stuff like peas...greens...corn...barbeque...baked chicken...and fried chicken". One participants talked about Sunday meals, "on Sundays we have a full meal, might be a couple of vegetables, a starch, and a meat", while another discussed family celebrations as "always centers around food".

Physical Activity. The discussion of physical activity and exercise mostly involved the children's school activities. There were a wide-range of time and activities that the participants believed demonstrated physical fitness, specifically exercising for a specific amount of time multiple times a week such as, "exercising...three times a week", "it should be one hour a day", "you can have 20 minutes five days a week", "walking, exercise...at least 30 minutes a day", "walking and/or running at least 30 minutes a day", and "three times a week at least 30 minutes each time".

Screentime Activities. When asked about television, most participants didn't allow more than a couple of hours during the week because of homework. Some had rules stating "two hours to watch TV" or "the time varies with homework". Depending on homework and other assignments, some participants reported up to "four to five hours a day...with TV, computer, electronics". Reportedly, most of the children did more television watching, electronic games, computer games, or other sedentary activities on the weekend as one parent stated "... watches more on the weekend than through the week". Another stated "during the week they not allowed to um...mess with the games, electronics, TV...none of that during the week... they probably binge on the weekends". One parent actually talked about her role when electronics are brought to the dinner table "...you have to be the parent and say, 'no', it's time to put that up".

The discussion of screen time activities involves computer usage which participants stated was heavily influenced by the child's homework. According to participants, homework has a lot to do with the time children spend on the computer therefore, participants are constantly monitoring computer usage when school is in session. One stated that "a lot of classrooms are moving to more on-line...a lot of kids...don't get books anymore and they have to go on-line to get the information...so it just really depends how the school is set up" as to how much computer time the children get. Some participants stated "it [computer usage] varies according to what they got to do on there", "you have to do them in moderations", and "you have to pay attention to... the computer, whether... homework, or they just doing it for fun". School work was a common theme noted with screen time activities.

Combination of Lifestyle Behaviors. Other participants relied on the combination of lifestyle behaviors consisting of a healthy diet with regular physical activity/exercise together. Examples included statements such as "the right amount of exercising, the right amount of ...vegetable intake and fruit intake" and "doing physical activities along with having a healthy diet". The participants also stated their beliefs in healthy behaviors as "being within your ideal body weight, but also being able to tolerate exercise and stress, whether its physical stress or mental stress" and "being able to do things that I need to do without limitations in activity...shortness of breath, fatigue, or other issues...a healthy child has a body that is proportioned height wise and weight".

In summary, lifestyle behaviors included diet and nutrition, physical activity, and screen time or sedentary behaviors. Most participants answered that healthy nutrition included fresh fruits, vegetables and grilled, broiled, or baked meats. The participants

also mentioned that unhealthy diets included huge meals such as fried foods, starches and other foods that are not nutritious. They all acknowledged that exercising three to five times a week was required for being physically fit but also stated at another time that their children participated in numerous extracurricular activities which they interpreted as being active. During the school week, the majority of participants limited the children's screen time or sedentary activities and monitored their children's computer to perform homework.

*Question No. 3*: What do the parents perceive as the healthcare provider's role in discussing childhood obesity?

This question examines the parent's perception of their role in discussing childhood obesity with their child's healthcare provider. All of the participants' children saw a healthcare provider on a regular basis or at least annually.

Healthcare Providers. All of the parents indicated that they rely on their child's healthcare provider for health information. One parent stated,

I do rely quite a bit on the doctor's reports ...but I do tend to deviate a little bit, you know, based on my family and what they may seem overweight based on their numbers is not necessarily for my family's make up because you know we tend to be big boned and heavier anyway but even though that might still be considered overweight.

Another parent said "I also rely on the doctor's chart for the children and myself to say what your weight should be for your age and your height and your frame size too."

A third parent noted that "if you've been going to the same doctor they know the history of your child especially...so they can kind of tell you what is really healthy for them."

Some participants have had regular conversations with healthcare providers concerning their children. One parent recalls, "at the last physical, the doctor asked that he stay the same weight and that'll catch him back up where he needs to be for his age bracket...she claims that he is a big boy with high metabolism ...that if he keeps growing the rate he is, he's going to be 6'2"." Some participants believe that the parents/caregivers' role is "an important role" as well as the healthcare provider role to care for children, "it really is a team effort...the doctor...might catch stuff or might recommend something that you didn't think about". Others commented that as a parent/caregiver "...you need to be informed and know what's going on...when we go to our yearly appointment she'll let me know, like, 'Well hey you need to introduce a lot more vegetables, drink a lot of water, you know and, do exercise also'."

Some participants believed that the "stats" that healthcare providers use are based on Caucasians and not African American. One commented that "only problem I have with stats is they always base us on them...I would like a study to show what's normal for the African-American rather than what's normal for the Caucasian." Some participants didn't perceive their child's health as an issue due to the fact they had other overweight family members who did not have health problems, "they [doctors] said the only thing he need to do is lose weight before you do have problems".

In summary, the focus groups' consensus was that they perceived that healthcare providers would tell them about their child's body weight and health. However, some participants leave out pertinent information and others don't believe in the statistics used

to evaluate body status. One parent/caregiver stated, "...as a parent, you know, when I take [child's name] for his checkups I'm not always as honest as I should be about his activity or his diet". Another stated "...only problem I have with stats is they always base us on them". Perception is another issue, they don't believe skinny is healthy but a heavier body weight is healthy depending on ethnicity. One participant stated, "...being big...skinny don't necessarily mean you're healthy". The African American parents in this study did not mention that a healthcare provider has communicated that their child was overweight or obese. A participant stated "I do rely quite a bit on the doctor's reports and the chart...if it says they're overweight for their height".

Question No. 4: What factors African American parents believe have most impacted their lifestyle behaviors in relation to their child's weight status?

This question was evaluated by interview questions that asked about risk factors contributing to their child's body weight and question about limitations and barriers to healthy eating and exercise. The participants expressed various factors that they believed impacted the behaviors of their family.

Familial Beliefs. There are many factors that impact African American lifestyles. A few examples are provided below such as parents' body weight, genetics, lifestyles and traditions, geographic location, and others. One of the factors that emerged from the data was the impact of parent's body weight status as illustrated in this statement by one of the participants "I feel that my being overweight all my life has contributed to my child being overweight" and another voiced that "my choice in portion sizes has influenced his choices as well." Others have mentioned genetics again in statements such as:

"genetics...she got genes on both sides". They also gave examples such as: "... she got a cousin that's grown...about the same height, so, and that's on my husband's side...both sides she probably got some hypertension". This participant goes on to discuss the lifestyle of the family: "their family's lifestyle is a contributing factor...they'll eat... big meals, steaks, baked potatoes, pork chops, greens, and chicken ...events to celebrate always centers around food". Similarly, another participant stated,

One of my child's risk factors besides genetics is family influence...cause trying to tell my mom who spends a lot of time with my kids and my aunt who spends a lot of time with my kids that we need to cut out some of the starches...feed them to death.

Diet and Nutrition. Another participant added as a factor, the area they live in:

I think it's more of a cultural thing...even the area that we live in – in the

South...we eat... love to eat, and especially the older generation...associate an appetite with being healthy...if a child doesn't wanna eat a lot, they'll worry what's going on.

Family traditions such as: "as a family we eat for every occasion holidays, birthdays, etc. and we eat soul food...we love to eat that 'taste good' stuff' was another factor.

The majority of the participants mentioned the higher cost of healthy foods including fruits and vegetables. One participant said "I went and got grapes and ... I bought 4... prepackaged...I think it was about \$35.00." Parents/caregivers often compare the cost of healthy food verses fast food. Another participant also talked about the expense of purchasing healthy fruits and vegetables, she stated "money...it's so expensive to eat healthy". She used a similar example of purchasing grapes: "a pound of

grapes is \$4.00...fresh fruit and vegetables, the lean meat, the organic fruits and vegetables, organic meats, all that stuff is so expensive." Another participant talked about how inexpensive it is to feed a family at fast food restaurants when she compared food prices, "you can go to McDonalds and you can get 20 nuggets, two fries and two drinks probably less than \$10.00 and that'll feed probably three or four people." Participants discussed the school meals, although the state has mandated changes for healthier diets, it was reported that "food at the cafeteria is not healthy...they eat pizza, fried chicken, burgers, hot dogs".

Time and Convenience. Participants frequently talked about "busy schedules" and the need for "time to exercise" and "time to cook at home". Many parents stated both time and convenience as common limitations/barriers and/or health risk factors in statements such:

Convenience. I mean most of the times it would be so much easier where our lives are hectic...it's just so much easier to just drive up to the vender and pick up something rather than go home and actually cook, you know between your job, the kids' activities ...it's just a lot to do. I think time is the important factor.

A participant in another session talked about time and the convenience of fast food when she stated:

It's easy for me. You don't have to worry about cleaning up anything. In my mind, it saves time. Because by the time we get in the house we've all eaten and everything. You don't have to dirty up the kitchen or anything, you go in, take your bath, you watch TV for a little bit then we go to bed. I have to do all this before I go to bed you know, and my kids big enough to where they can heat their

own food. But it's still time from when you get home. So, we eat a lot on the road. And we don't eat stop and sit in the restaurant. We normally do a lot of eating in my car.

Other factors that contribute to childhood obesity according to the participants included "my family's eating habits, definitely..., we eat late in the day, we eat fried foods, and we eat out quite a bit." Others added "our eating pattern, our busy lives and the convenience of fast food make it easy just to grab something that's not healthy for you to eat, but it feeds you...and you don't have to be eating later, waiting for a cooked meal" and others echoed:

Eating fast food, eating late at night – or you know, eating chips and cookies, you know snack foods...some parents have such busy schedules...you just can't...when you get home you got so much homework to do you just don't have time to cook, it's just convenient to get fast food.

The participants mentioned that "it's so easy to pick up food than to go home and, and cook a meal". "I get so busy, so many things to do that it almost forces you to eat out" serves as an example of one statement made by participants. Participants often discussed their busy lifestyle, coming home late, and lack of time to purchase and cook as reasons for their habit of fast food and eating out.

Question No. 5: What do African Americans parents/caregivers identify as facilitators to promote changes in lifestyle behaviors in their family to prevent obesity?

This question was evaluated through an interview question which addressed what parents/caregivers would be willing to do to help their child lose weight and the parent's

role in addressing their child's healthcare provider. The answers from one focus group were, "we have started exercising as a family to make it more fun. And just playing sports together, like running around outside, and letting them go ride bikes and just walk. Having them more active, getting them off the couch." While another mother from the same focus group stated, "I would say being more physically active with exercise and changing our eating habits with less fried food and less fast food and more fruits and vegetables and more water instead of Kool-Aid and drinks."

Another focus group member stated that she would "walk with them, exercise with your child", while another parent stated, "...I try to keep my child in activities, like I let them do tennis, karate, swimming" and the third participant stated "well, I try to prepare food for them to eat. And make sure they don't have to eat out all the time..."

Lastly, a participant stated "I would get them outside and we would be very active together, first and then we would start cutting back on their diet and then introducing them to different good foods. You know, salads, vegetables, fresh fruit, that kind of stuff. I just think if they become active first, then they'll be more apt to change their diet."

The parents/caregivers explained that they depended on the child's healthcare provider to tell them if their children have health or weight problems and if so, what they need to do to correct them. However, the parents did not state that they received behaviors change recommendations from their healthcare providers. Comments that participants did mention were "My child has regular check-ups and I rely on the doctor to let me know if we need to make modifications". Lastly, one participant stated "the doctor...might catch stuff or might recommend something that you didn't think about".

Most of the participants believed that their involvement with their child's activities would promote change. Comments regarding involvement included, "get out there with them and encourage them to do it [physical activity]" and "I want us to start exercising together". Other participants believed in having their children participate in chores [such as grass cutting], "I think like for boys, you just make them like do stuff, like yard work and stuff like that... I don't think people make their kids do a whole lot of stuff besides the regular school stuff, sports and whatever... we could have gotten a riding mower but I bought a push mower".

Several participants provided examples of how to make changes in diet and exercise a lifestyle change for example, "I would say being more physically active with exercise and changing our eating habits with less fried food and less fast food and more fruits and vegetables and more water instead of Kool-Aid and drinks". Another stated, "I saw an article where if you stop drinking all the sodas and the fruit juices you could lose ten pounds in a year because of all the added sugar that you just consume from drinks."

Others commented that they needed to do more cooking, "if we ate less of the fried, less of the fast food and more cooking where I know what's going into the dish...it's hard to do it all the time". Another stated "I would get them outside and we would be very active together, first and then we would start cutting back on their diet and then introducing them to different good foods...you know, salads, vegetables, fresh fruit, that kind of stuff...I just think if they become active first, then they'll be more apt to change their diet".

Many of the parents/caregivers believed that having their children involved in multiple activities would keep their children healthy. They stated "I know I try to keep

my child in activities, like I let them do tennis, karate, swimming... golf...I try to keep her active during the summer". Another stated, "I have him in summer camp where they do swimming and all types of activities". Others believed it is the parents/caregivers job to model healthy behaviors "...if you work with your child and your child see that you're trying to eat healthy and stuff then...he's gonna want to imitate you...he's gonna want to eat right and he's gonna to share" and "take them in the kitchen and teach them how to make something or cook".

Parent/caregiver participants believed that they must monitor their children's activities so that they can have quality family time as one stated, "at the dinner table you don't be sitting there allowing your child to play the computer games and you're trying to have a family meal". Most participants decided that for a major change to occur that the entire family would have to be involved, "we would have to actually get on a schedule...the whole family would have to participate, yea, like I'm not going to cook something for me and then something for you...everybody's gonna have to be on the same diet and be in it all together". Other suggestions for change were "having healthy alternatives, I'd say, rather than having a bag of chips on the table, have some apples on the table..." and "we really need to start going back to growing our own food."

Question No. 6: What do African American parents/caregivers believe will motivate them to change their family's lifestyle habits, practices, and beliefs?

The sixth question was addressed with the last interview question. One participant quickly stated, "What motivates me a lot is money... I have health issues myself, that I know I need to be doing more exercising but I've gotten lazy and I

haven't...and it's really got life or death for me". She continued to state "if someone said, 'I'll give you a \$100 for every 20 pounds you lose...I'd have my butt out there trying to do something". Another parent stated:

...unfortunately how I look at it, you can't do it for self- motivation because you got so many easy excuses about life, about working...household chores...responsibilities at school, cooking and cleaning... It's just convenient to go get something quick to eat...but, somebody put something out there – very lucrative, saying, like the insurance, your job...somebody giving you some financial gain.

Being overweight was a motivator for some participants, one stated:

I feel like the more I become over-weight...that's what's motivating me now...

I'm the appearance of what I'm telling them they should not be...what they should not be doing...I don't want to jeopardize me from being the mother I should be for them and the grandmother that I hope to be one day for their kids...that's what's motivating me to help them...

Other participants felt like their health should be a motivating factor:

...health is a big motivation with diabetes on both sides of the family and heart disease and everything...you really have to take your health into concern and to start training them up on the correct path so that when they get older they'll be used to it.

#### Another stated:

...health problems yourself, that does motivate you to get with your children and make sure that they're doing some of the right things that you didn't do right to help their health be a little better so that they will live longer healthier lives.

### The Themes

Data analysis began early in the study and continued with reviewing the recorded focus group sessions, field notes, observations of verbal and non-verbal communication, emotions, gestures, and journal review until data saturation. Two experienced qualitative researchers assisted with the data analysis process to ensure trustworthiness and accuracy. As a result of this study, four themes were revealed: denial or false perception, culture and traditions, time and convenience, and finances or expenses. The data also revealed a lack of communication among these parents/caregivers and their children's healthcare providers related to childhood obesity and its complications.

# Theme No. 1: Denial or False Perception

A parental perception of their child as overweight was an inclusion criterion for this study. Nonetheless, only five of the fifteen enrolled participants correctly identified their child's body weight category (overweight versus obese) therefore, the theme denial or false perception emerged. The ten parents/caregivers (67%) who incorrectly identified their children's weight category on the sociodemographic form all indicated that they believed their obese child fell into the less severe overweight category. These same

parents/caregivers used different analogies to define a healthy child in the focus group sessions.

Parent's Definition of Health. Comments from a 42-year old married, dialysis patient and mother of two obese children stated that "a healthy child to me would be not...not obese. Um...they may be a little overweight, but as long as they are able to physically do things without...well, I would say the normal regular things ..."; a second overweight 41-year old married mother stated "I don't have a problem with a little weight, unless they're just real overweight and can't walk, and can't breathe, they short winded, and can't run. Stuff like that and have good skin."

A 27-year old mother stated, "...some people are born just to be big, but they also are healthy because they are eating right." A 51-year old aunt stated "I think a healthy child... they don't look like they eat, eat, eat, eat, eat, not too skinny, not real, real big. Um...just...I guess they just overall look healthy, not-not a certain weight..." or "he's not-he's not like big, big, big...whatever you call it..."

Parent's Perception of Weight. There were also statements indicating that the participants did not want their children to labeled as overweight or obese for example, "I look at my child...I can see if she has little rolls on her side...And that kind of makes me...concerned about her weight...I don't want to project that on her...I don't want her to have that perception of bad self..." while another stated, "Um...I guess I don't want to hurt his self-esteem." Another participant "...what they may seem overweight based on their numbers is not necessarily for my family's make up because you know we tend to be big boned and heavier anyway but even thought that might still be considered

overweight." Other comments about healthy children from a 42-year old single mother of two. "He's not so much as, you know, fat-fat. He's more like solid".

These findings and other comments from the collected data were used to evolve the theme denial or false perception. This theme is the result of the participants' perception of their children's body weight status based on their view of reality. African American's identification of overweight and obese is perceived differently in this population in rural Mississippi. This misperception is included as denial or false perception of their children's obesity.

#### Theme No. 2: Culture and Traditions

The second theme that evolved from the data included the participants' cultural traditions, practices, familial influences, and lifestyle behaviors.

Cultural Perception of Body Weight. Multiple comments such as "bigness runs in the family" and family members with "overweight aunts and uncles" were indicative of a norm in these African American families. Other comments used to describe healthy children were "not obese, [instead] a little overweight"; "solid not fat"; "healthy and bigboned"; "skinny doesn't mean healthy"; "depends on family background" and "a little weight". While other participants define a healthy child as being "able to do daily activities"; it "varies on what people say"; having a "little weight but able to walk, breathe, and run"; "not being sick all the time"; and "no shortness of breath". One overweight mother stated that the appearance of "chubby cheeks, flappy arms, and saggy stomach" was an indication of an overweight child.

Perception of Healthy and Genetics. Some parents/caregivers believed that genetics played a role in chronic illnesses in their family. In discussions about healthy children there were vague comments such as "it all depends on your family background"; "slim and thin"; "well if they're not sick all the time then you would consider them being healthy. They don't get colds, and flus..." or "I think a healthy child, um..., I think they look taken care of and not just their weight..."

When asked about their children's body weight as a health risk, some participants agreed and some did not. A determining factor, according the participants, appeared to be based on whether or not chronic illness ran in the family as one parent stated:

...but I do know that he has a potential because his genetic lines have hypertension and I am probably the only one...that has diabetes. I don't know where that came from, but, because I know that those.... that obesity and those bad eating habits are predecessors for...hypertension and diabetes...I try to watch them and... teach them about that in their own lay language.

Another participant related her comments about her daughter to genetics and lifestyles stating:

...I know on my, for my daughter, she...she, like I say she's 4'11. But she got genes on both sides. I mean she got a cousin that's grown and got two kids and she about the same height, so, and that's on my husband's side. So on both sides she got short people. And on both sides she probably got some hypertension. More so on her daddy's side cause I don't have hypertension. But on her daddy's side, he and all his siblings have hypertension. So definitely genetics. And lifestyle. I will say they love to eat and they'll eat, you know, big meals, steaks,

baked potatoes, pork chops, greens, chicken...and when they have events to celebrate, it always centers around food. So I think the lifestyle also.

Familial Influences. Familial influences by extended family members such as aunts, uncles, and grandparents were mentioned in the focus group discussions including statements such as "it takes a village to raise a child". Participants also acknowledged that their families have a belief that "if kids don't eat, they sick"; "if you don't eat, you sick or something wrong" or they push foods on the children as one parent stated "they want to feed them to death". These are examples of how the extended African American families described have associated a child's appetite with health status. Some participants believe that family eating habits (eating late at night, fried foods, fast foods) may increase the likelihood for obesity. One participant when asked about risk factors and limitations and/or barriers stated:

I think it's more of a cultural thing, but I also think that it's...definitely a cultural and maybe even the area that we live...We love to eat, and especially the older generation. They associate an appetite with being healthy. If a child doesn't wanna eat a lot, they'll worry what's going on.

Another participant further expounded, "I think one of my child's risk factors besides genetics is family influence. Cause trying to tell my mom who spends a lot of time with my kids and my aunt ... that we need to cut out some of the starches [macaroni and cheese, potatoes]."

### **Traditions**

Traditions include such things as "eating meals together, family time..." An activity that was mentioned as a tradition in one household was the belief that their

families "eat for every occasion, holiday, and birthday". This activity included eating large satiety meals such as "...big meals, steaks, baked potatoes, pork chops, greens, chicken..." as one mother commented. Participants also included that they "love food" especially "big meals" and "soul food" as celebrations. The participants spoke of their children typically eating "the wrong stuff" as one participant stated "...you're not overweight from eating too much fruit. You're overweight from eating the wrong stuff. So, the fried foods, and fast foods and all that could block arteries". Another stated, children are "constantly eating even when not hungry" or "just because they see it". Another participant talked about her past experiences as a child and her extended family in this example: "like in the old day when Grandma cooked...whatever she cooked that's what you gotta eat".

While discussing traditions and what African American parents/caregivers could alter or change to promote positive lifestyle changes, one 27-year-old mother stated "well, we really need to start going back to growing our own food, with garden-wise" and mentioned. "...a lot of people really have stopped gardening where, you know, you used to have greens and stuff out in your back yard that you can eat". Another 27-year old mother made a suggestion to motivate children stating, "...take them in the kitchen and teach them how to make something or cook" which she experienced in her childhood.

Lifestyle Habits. When asked about healthy diets, one participant stated "is there a traditional diet at our house? No. We just eat stuff like peas and greens and corn and barbeque and baked chicken and fried chicken." Some participants because of their busy lifestyle use extended family to help them care for their children but emphasize that this

can be a problem when it comes to lifestyle habits for their household. This parent stated that she is aware of her child's body weight and remarked:

...overweight he is, but I try to watch him, but it's hard because I have a mother who has that traditional mindset that if they're eating, no matter how much they eat, they gonna feed them, they gonna pacify them with food to make them feel good. They don't care what they eat.

Another pattern that became apparent during the focus group sessions was that not only were the children of the participants obese but their parents/caregivers were also overweight or obese. Therefore, when asked about risk factors there were some participants who mentioned their own body weight and their health as contributing factors. One acknowledged the issue by saying. "I feel that my being overweight all my life has contributed to my child being overweight. My choice in portion sizes has influenced his choices as well." Another parent participant mentioned that:

...when you have health problems yourself that does motivate you to get with your children and make sure that they're doing some of the right things that you didn't do right to help their health be a little better so that they will live longer healthier lives.

#### Theme No. 3: Time and Convenience

Time and convenience are the third theme that evolved from the collected data in this study. Time emerged when participants discussed risk factors contributing to their child's body weight, limitations and barriers against healthy eating and exercise and when discussing things parents/caregivers could do to help their child lose weight. Many

participants mentioned busy lifestyles which included working, afterschool activities such as sports, homework, and other obligations. Convenience arose from the data as participants repeatedly referenced their busy lifestyle and the convenience of fast food in their daily routines.

Lifestyle and Convenience. One participant when asked about motivation for healthier lifestyle choices stated that she could practice them if she "was a real housewife and didn't have to work". She felt this would give her time to prepare healthy meals and to participate in regular physical activity. She gave an example of what she does in the summer when she's not working:

Cause during the summer, let me tell you what I do. I get up, fix some breakfast, and take them to camp. I go exercise, I come back home, clean up or do whatever I'm gonna do...I go out in my yard and work, and then I fix dinner, then they come home and then they play outside, and exercise and all that stuff. Then they eat their dinner and... go to bed. So if I could be a housewife and could afford that...I could manage that time...to plan out a healthy diet and to get exercise in...But if you have to work full time every day and activities and all that stuff you don't have time. And so if you don't have time and you're the guardian of these kids, then they don't have time.

Another participant stated she needed to do more cooking but time was a major factor:

I think a significant change we can make is definitely with eating...if we ate less of the fried, less of the fast food and more cooking where I know what's going into the dish. Which I do some of that but you know with working and all, it's hard to do it all the time.

Another stated "you just don't have time to just sit down and just cook every day like our parents did." The convenience of fast food remained constant in the data among the focus group participants. Fast food made a quick meal for participants who felt they did not have time to cook. When participants were asked about how often their children ate fast food many stated "I'd probably say about 2 to 3 times a week"; others made similar statements but one of the participants expounded:

... for me it's probably about 3 and 4 times a week, cause like you say it's just easier to just drop by and pick up some food and, you know, go on about your day because we're in a microwave society. Everybody is running here running there and you just don't have time to just sit down and just cook every day like our parents did.

Participants frequently stated that cooking healthy meals takes time, one participant said, "When I do cook, I try to cook enough for two days ...and I put it in refrigerator to just warm up." Some participants talked about gardening as an avenue for healthy meals; however, gardening takes time which working these participants felt that they did not have. There was some discussion about giving children cereal and milk because it was easy and quick. "It's easy to give them cereal and milk. It's cheaper to give them cereal and milk. No prep time, it's easy. Just pour it in a bowl and go." Although cereal and milk was convenient, this participant was also aware of the nutritional value of the cereal and milk "... look at the sugar and the calories in cereal versus you getting up going buy the fruit, you gotta pick through the fruit". There were multiple comments about lack of time to prepare and cook meals, and lack of time for

multiple trips to grocery store to purchase fresh fruits and vegetables "...you just don't have time to cook, it's just convenient to get fast food." As another participant stated:

...our schedule is...I don't think it's enough hours in the day really to do...you got to work, you got kids - you got to go home, you got to clean up, you got to do homework, you got to make sure they ready for school the next day. So really the time ...is an issue.

Participants also mentioned the fact that fresh fruits and vegetables spoil quickly so frequent trips are needed to the grocery store "you gotta eat it by a certain time or it's gonna go bad". Another stated:

... I feel like I probably could, I can afford to go and buy the food, but I don't have the time to cook it before it go bad. Like, you know, if I go and buy like 3 and 4 different types of vegetables and you know whatever, am I gonna have time to cook it before it go bad? You know if I buy this fresh fruit are we gonna eat it before it go bad.

Another voiced "just because the parent, both parents has such busy schedules and the parents have to work, you just can't...when you get home you got so much homework to do you just don't have time to cook, it's just convenient to get fast food."

Time was needed for healthier behaviors such as "just time to exercise" and "time to cook at home". Participants also discussed the time children spent on screen-related activities when not working on homework "...they need to have outside activities as well...where they won't spend so much time on electronic games" or "if they have chores to do they ain't got time to watch TV".

There were numerous times when the participants conveyed convenience and then there were times when they used the actual words "convenience" or "convenient". Most of the comments communicated about convenience of fast food were related to the conflict between having adequate time to cook and having busy schedules and cooking:

Our eating pattern, our busy lives and the convenience of fast food make it easy just to grab something that's not healthy for you to eat, but it feeds you. And you don't have to be eating later, waiting for a cooked meal. Just because the parent, both parents has such busy schedules and the parents have to work, you just can't...when you get home you got so much homework to do you just don't have time to cook, it's just convenient to get fast food...and ...household chores, the kid's responsibilities at school, cooking and cleaning... It's just convenient to go get something quick to eat."

### Other comments included:

"Convenience. I mean most of the times it would be so much easier where our lives are hectic...it's just so much easier to just drive up to the vender and pick up something rather than go home and actually cook, you know between your job, the kids' activities ...it's just a lot to do. I think time is the important factor."

While another participant stated "...you know the convenience of fast food versus clean eating-it's so easy to pick up food than to go home and cook a meal."

Homework. Homework takes a substantial amount of time for children and their parent/caregivers during the school year when everyone is busy with schedules and routines. Many parent/caregivers described a practice of getting home late in the evening due to sporting practice and other events. Participants explained that there was not

enough time to prepare meals after getting home, completing homework, bathing, and getting ready for the next day's routines. Participants frequently mentioned "...get home sometime until around 7 or 8 o'clock...then...homework..."; "...depends on how much homework you have..." or "...when you get home you got so much homework..." When it comes to homework and screentime activities with the computer, one participant with two school-age children stated, "the school system says one thing; we don't want you doing this technological stuff in the evening time; not so much screen time. But then they encouraging them cause them putting their assignments on the computer." Other statements such as "...they don't get books anymore and they have to go on-line to get the information..." It was noted that most participants either helped with or monitored their children's homework.

Time of Day for Meals. Participants felt that the time of day when families ate their evening meals was a prevalent factor contributing to obesity. Several participants mentioned "the time that they eat" which was usually late in the evening after activities. One participant stated "...you know, eating fast food, eating late at night...contributes to that [child's body weight]". Another participant stated, "...we eat late in the day, we eat fried foods, we eat out quite a bit so yes, I think all those things have contributed" when asked about risk factors. Since time was an issue when it comes to purchasing and preparing meals, the convenience of fast food helped solve this issue for many participants. Several participants stated, "we don't prepare meals ahead of time" therefore, they relied on fast food.

Physical Activity and Exercise. Participants stated that it took time to participate in regular exercise. Participants also believed that a healthy routine constituted regular

physical activity at least "three to five times a week for 30 minutes to an hour". Limitations that precluded physical activity included the seasons. Some participants mentioned the "time of year with weather. What I've seen that will make a difference is I work out with her (the daughter) and in the summertime I walk with her" because it's easier to exercise in summer months when most children are out of school with no homework. Therefore, there is more physical activity during the summer time than in the winter months. Some participants did going to the gym on a regular basis to exercise, however they did not take their children with them. One participant stated:

Um, I like to go to the gym. But, me myself don't go to the gym as much in the winter time as I do because by the time I get off work, get them, or leave them over at my Mom's house it's pitch black dark and its cold and I wanna get home and go to bed. But, um, in the summer time, I try to keep them involved in activities and I try to exercise and stuff myself.

Other participants suggested that they go to the gym so early that their children didn't want to get up and go by stating, "...she does not go with me...80-95% adults...And I go to the gym at 5:00 in the morning. She don't want to get up that early." While another participant states, "I get up at 4am and go to the gym."

One participant gives an account of a typical weekday with her two children when engaging in conversation about meals and activities:

...and pretty much they busy...somebody has something every day. But
Thursdays are my big day... gotta be at basketball at 4...gotta be at gymnastics at
4:30... cheerleader practice at 6, ... game at 7, ... take pictures are 7:45. And by
the time we get out of activities it's gonna be 8 - 8:30. They got spelling test,

vocabulary test, and social studies test tomorrow. So, we gonna have to come home and go over that stuff and then it's time to go to bed. So tonight, even though in my mind its morning, I say that, shoot, we got some leftover lasagna - we gonna eat that. And then I took some greens out the refrigerator, we can heat up that. I don't feel like going home and heat up nothing. I want them to go to bed...

However, when asked about how much time their children spent on screen activities (e.g. television, computer usage, and electronics) the participants gave various time estimates. The times during the weekday ranged from "no television to computer usage only for homework". Other participants suggested screen time ranged from "less than an hour" up to "five hours weekly" with the majority of the children having "unlimited use on the weekends".

# Theme No. 4: Finances/Expenses

Although two-thirds of the participants had household incomes of \$50,000.00 or more, all participants voiced a concern about finances. Several participants commented on the high cost of healthy foods, "Healthy foods such as fresh fruits and vegetables, organic foods, salads, and sugar alternatives are more expensive than other foods". It was their perception that it was less expensive to buy fast foods than to purchase healthy foods. For example:

Food cost for one...when you have a family you're trying to feed on a budget, it's much easier to pick up a \$5 pizza...than to...go in store and buy a chicken and

buy broccoli...you know make a meal when you're in a rush and on a budget, a \$5 large pizza is quick and easy;

another participant discussed barriers to healthy eating and lifestyles as

I've said it for a long time, I don't know how true it is cause I never really made a comparison...but I've always said *cost* is a big factor for me because it seems that the healthier stuff is more expensive...;

#### and another verbalized

...you know, you can get a cheap can of this or box of that and it cooks easily, you know, and whatever. But, you know, to get the good stuff is, is costly...the storage of it you know it goes bad quicker you know and things like that...if you don't cook it right then. You know, it's just a lot of factors weigh into that, but I would say cost mainly.

Furthermore, "'junk foods'" such as chips, cookies, candies, are regularly inexpensive to purchase and readily available" while healthier foods are "\$35.00 grapes" and "\$4.00 eggs". Participants "money" in the form of "decrease insurance premiums", or some other form of "financial gain" as an incentive to lose weight.

When asked about motivators statements such as "If you made that more cost economical...at the end of the day, money" were voiced. Others participants mentioned purchasing cheaper food products when it comes to cooking "...you can get a cheap can of this or box of that and it cooks easily"; "you know, to get the good stuff is, is costly...the storage of it you know it goes bad quicker you know and things like that...if you don't cook it right then." Another parent discussed a motivating factor for her:

Well a good motivator would be free or low cost program for obese individuals.

You know. It's so expensive. These could, these free programs could be like free day at the gym, free exercise program, you know, low cost...healthy foods and such, you know, like vegetables, fruits, lean meats, you know. Then as far as computer and television, I think the only thing that would probably motivate my child is ...would probably be MONEY!

A display of the themes that evolved from the data themes and their relationship to childhood obesity was designed (Figure 2).

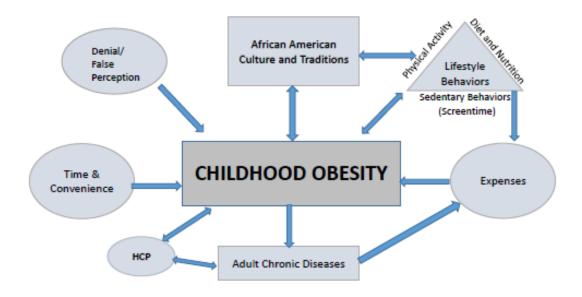


Figure 2. Contributing Factors to Childhood Obesity

Figure 2. Childhood obesity is directly related to diet and nutrition, physical activity, and sedentary. Lifestyle behaviors are directly influenced by African American culture and traditions. This study on the phenomenon of childhood obesity revealed directly related themes of denial/false perception, culture and traditions, time and convenience, and finances and expenses. Childhood obesity is affected by African American culture and traditions. African American culture and traditions affects childhood obesity. Adult chronic disease is directly affected by the healthcare providers and increase finances and expenses. Healthcare providers are responsible for care of patients/families affected by childhood obesity.

# Contributing Factors to Childhood Obesity in African Americans

Culture and Traditions. Participants in this qualitative study suggested that ethnic culture and traditions may impact this phenomenon significantly. The participants suggested that their African American culture and traditions affected lifestyle behaviors such as diet and nutrition, physical activity, and screen time or other sedentary activities. Factors that were particularly affected by this culture specific to the perspectives of African American parents/caregivers of overweight or obese children are their perception of obesity, their perception of their family's genetics, family practices, and the family's belief system. In combination, these factors include busy lifestyles, finances, and the communication with the child's healthcare provider had were described as having a major impact on childhood obesity in African American children.

Definition of Obesity. First participants defined obesity very differently than the standard definition found in medical literature. The participants defined obesity in their children according to functionality, recognizing it only when a child is unable to perform a usual activity. This perception was confirmed for the participants by the failure of their child's healthcare provider to initiate a discussion of weight as a medical problem. The participants' view of their child's weight in their cultural group was as "big-boned", "thick", and "not fat-fat". African American parent/caregivers only become concerned about body weight and health when they visually noticed the child had "chubby cheeks", "flappy arms", "saggy stomach", or presented with "shortness of breath", appeared "sick all the time" or was unable to "walk, breathe, or run". This group also voiced concerns with comparing the "stats" (height, weight, BMI) of African American to "stats" of Caucasians.

*Habits.* Culture encompasses one's beliefs, practices, and customs. The African American participants in this study believed that "bigness runs in the family". Reflecting back on the study's participants, the majority appeared overweight or obese. The participants mentioned that older generations or extended family believed that they should feed everybody and lack of appetite was a sign of illness. African American parents/caregivers also mentioned that celebrations, Sunday dinners, and other family activities centered around food which included large meals composed of fried foods (chicken), barbeque, steaks, pork chops, some smothered in gravy, starches (mac-ncheese), and vegetables (greens, corn). These parents/caregivers also commented on "junk foods" (candy, sugary drinks, cookies, cereal) versus healthy alternatives (fruit). Some participants purchased junk foods as snacks and while other deliberately did not, but all mentioned there were wrappers in their child's pockets and book bags. The participants also mentioned that their children snacked even though they were not hungry; suggesting that they ate the snacks because they saw them. Several mentioned juices and sweetened drinks like Kool-Aid as being unhealthy. Other unhealthy habits included eating late in the evenings and the consumption of fast foods.

Physical Activity. Lifestyle behaviors include not only diet and nutrition but physical activity as well as screen time or other sedentary behaviors. This group of parents/caregivers mentioned that their children were enrolled in numerous extracurricular activities such as "football", "baseball", "swimming", "basketball", and "ROTC" in order to keep them physically fit. Since many of these activities were seasonal, some participants enrolled their children in other activities over the summer. Other parents assigned their children physically rigorous chores such as cutting grass

with a push mower. As a group, the parents/caregivers knew that being physical fit meant regular exercise several times a week. In fact, many of the parents went to the gym regularly, although none described bringing their children.

Sedentary Behaviors. Screen time or sedentary behaviors were heavily impacted by homework. Participants stated that homework occupied a great deal of time during the weekdays. Most children were required to use the computer for some of their homework assignments and participants stated that they had to constantly monitor those times to prevent their child from playing on the computer. Most participants only allotted a certain amount of time during weekdays for children to watch television or use other electronics. None of the participants mentioned cellphones; however, one did mention that parents/caregivers needed to step up and not allow electronics at the dinner table.

Denial or False Perception. The theme of denial or false perception evolved as a result of the participants' viewpoint that obesity is defined based on functionality, genetics, body image perceptions, and additional factors other than weight-for-height (calculated for BMI). Only 33% of the participants in this study accurately perceived their child's body weight. Although they recognized that their children were overweight, the impression was that being overweight was accepted in this cultural group and therefore, not a problem.

Time and Convenience. Another theme, one that could likely apply to many ethnic groups, which emerged from the data was the importance of time and convenience. The data contained many statements about everyone's schedule being busy. The busy lifestyles included working parents/caregivers, children's extracurricular activities, and most influential of all, homework. Children had to be at activities at various times in the

afternoon and evening, therefore, there was no time to go home and cook dinner.

Activities were followed by homework, baths, and preparation for the next day's activities and school. Also, in order to provide healthy fruits and vegetables, parents would be required to make several trips to the grocery store each week and participants felt they could not accommodate this extra errand.

According to the participants, it was much more convenient to go through a fast-food drive-through window and pick up food for dinner than to go home and cook a meal. The participants also commented that eating in the car prevented having time to clean up kitchen at home. Once hone, the family could concentrate on homework, baths, and the next day and not have to worry about going to the grocery store, preparing the meal, or sitting down to eat it. The data also revealed that the majority of these families ate late or at night.

Finances and Expenses. Participants expressed that in addition to requiring valuable time for shopping, eating healthy foods was very expensive. Although 66.7% of the participants had household incomes of \$50,000 or higher they were concerned with expenses. A couple of participants talked about high costs of grapes. Others mentioned the short interval between purchasing fresh fruits and vegetable and them going "bad". The convenience and less expensive cost of fast food appeared in the data on numerous occasions. It was more convenient and cost-effective to pick up a \$5 pizza or go to McDonalds® than to purchase and cook healthy food items. Only one participants mentioned some restaurants are substituting juice and milk for sodas in their children's meal.

The impact of childhood obesity on finances, however, was a motivating factor for changing behavior. Obese children are acquitting adult chronic illnesses which contribute to morbidity and mortality; thus contributing to increase health care expenses. Although participants mentioned family history of chronic diseases, they did not appear to be focused on this; several mentioned diabetes, hypertension and other health disorders. Although many participants expressed concern about the cost of healthy foods, none mentioned the cost of gym memberships, of electronic devices and computers, games for electronics, or cellphone costs.

Healthcare Providers. The pediatric impacts both childhood obesity and the resulting chronic illnesses. Although all participants stated that their children saw a healthcare provider on a regular basis, none mentioned that the provider identified their child as overweight or obese. None of the participants mentioned that their child was on a particular diet or physical activity routine recommended by the provider. All participants stated that they based decisions concerning their children's body weight and health on their healthcare provider. One of the participants did mentioned that although she was a healthcare provider she didn't always tell her child's provider the whole truth when it came to her child. One participant mentioned being told to maintain the "same weight" for her child while other participants mentioned health problems in the family or themselves but not with their children. The data revealed that although the participants visited the healthcare provider, there was reportedly a lack of communication on the body weight status of their children until it became a problem or issue.

*Motivating Factors*. Participants were able to provide suggestions when asked what would motivate them to make healthy lifestyle changes. For example, some

participants mentioned receiving financial incentives, either money or lowered insurance premiums, reduced prices for healthy foods, and incentives for weight loss. Participants also mentioned healthier snack alternatives, substituting water or even Crystal light for juices, engaging physical activity as a family, motivating the child, and other activities. Most importantly, the majority of the participants mentioned lifestyle behaviors that included the entire family jointly with parents/caregivers being role models.

### **SUMMARY**

Data analysis revealed four themes regarding the experience of parenting an overweight or obese African American child in rural Mississippi: (a) denial or false perception, (b) culture and traditions, (c) time and convenience, and (d) finances or expenses. The African American parent/caregiver participants in this study believed that genetics plays a major role in obesity. The participants also defined obesity as body weight on appearance, family body weight, and functionality rather than body mass index. The participants believed that the BMI statistics based on height and weight provided by the Center for Disease Control did not apply to them and they wanted statistics based on African American norms. Sixty-seven percent of the participants in this study misperceived their children's body weight as overweight rather than obese.

Most of the participants were aware of healthy foods and what it means to be physical fit. Some of the participants recognized healthy foods such as fresh fruits and vegetables as well as baked or broiled meats. They considered unhealthy foods to be fried foods, junk foods (chips, candy), as well as sweetened beverages. They also identified that being physical fit meant exercising for several times a week for a specified

amount of time. Although they were aware of these healthy lifestyle behaviors, many mentioned a lack of time and money to participate in healthier diet and nutrition behaviors.

Finances and money comprised another theme that evolved from the study.

Participants frequently mentioned the cost of healthy foods and the inconvenience of shopping for and preparing fresh foods. Several parents/caregivers frequented a gym but none took their children with them. Additionally, none of these parents/caregivers complained about the price of their gym memberships.

All of the participants believe that their children were healthy because they relied on the healthcare provider to communicate to them if their child had a body weight issue, or a potential or actual health issue. However, none of the healthcare providers had reportedly mentioned the childhood obesity of these children to any of the parents.

Therefore, all the parents/caregivers believed that since their children regularly saw a healthcare provider, they were healthy and not obese.

The participants believed that they could affect obesity in their children. All mentioned family participation, from cooking meals together to exercising as a family as possible motivators. One participant mentioned gardening while another mentioned teaching the child to cook as her parents/grandparents did.

The next chapter discusses, strength and limitations of this study, clinical implications, recommendations for future research, and conclusions. The themes that emerged from the data are further discussed.

#### CHAPTER FIVE

#### **DISCUSSION**

This study examined the parental perspectives/perceptions, cultural beliefs, values, behaviors, and factors contributing to childhood obesity within African American families residing in a rural Mississippi town. The facilitators and barriers to parental lifestyle changes to reduce childhood obesity were also examined. This chapter presents a discussion, conclusion, and recommendations based on the findings from this qualitative study exploring parental perceptions of obesity in their children.

This study's methodology was influenced by an ethnographic approach, using participants from similar background in the same rural community, in which African American participants revealed a wealth of information about their cultural context, beliefs, behaviors, and way of life. An adapted ethnographic approach was used to facilitate the understanding of the phenomenon of childhood obesity from the perspective of African Americans parents and caregivers. The constructivist paradigm was used to inquire about the participants' current realities as they view them in relation to childhood obesity.

Participants for five focus group sessions were recruited by means of purposeful sampling at four churches in central Mississippi. Fifteen parents/caregivers of obese African American school age children and adolescents participated in the audiotaped sessions which were guided by structured interview questions. The audiotapes of these

sessions were transcribed, verified, and analyzed based on the research questions. Four major themes emerged: false perception or denial, time and convenience, culture and traditions, and finances or expenses.

#### Themes

# False Perception or Denial

African Americans often define their weight status differently than medical providers or members of other ethnic groups (Pena, Dixon, and Taveras, 2012). In this study, participants stated their belief that standard weight guidelines provided by health care providers apply only to Caucasians and not to African Americans. African Americans use functional terms to describe body weight and the appearance of their children, using words such as "thick", "solid" or "heavy" to define their body weight rather than categories such as overweight or obese from standardized medical charts (Alexander, Alfonso, & Hansen, 2015; Boyington et al., 2008; Burnet et al., 2007). Participants in this study also used these terms to describe weight in their African American children. Participants stated that their child's body weight was not an issue for them unless they observed difficulty in daily activities. When African Americans families consist entirely of overweight or obese family members, parents tend to identify their overweight or obese child's body weight as a norm rather than as a health problem (Alexander, Alfonso, & Hansen, 2015; Carcone et al., 2011; Reed et al., 2013; Snethen et al., 2008). In this study, two-thirds (66.7%) of the participants incorrectly perceived their child's accurate body weight category based on CDC standards as seen in Table 2.

Table 2

Comparison of Parent's Perception and Child's Actual Body Weight Status

Parent/Caregiver	Parent's Perception	Actual Body Weight Status
1A	Obese	Obese
1B	Overweight	Obese
1C	Overweight	Obese
2A	Obese	Obese
2B	Overweight	Obese
2C	Overweight	Obese
3A	Overweight	Obese
3B	Overweight	Obese
3C	Overweight	Obese
4A	Obese	Obese
4B	Obese	Obese
4C	Overweight	Obese
5A	Overweight	Obese
5B	Overweight	Obese
5C	Obese	Obese

Participants in this study repeatedly stated that their perception of their child's body weight status was strongly influenced by reports from their child's healthcare provider. Prior research (Chochran, Neal, Cottrell, & Ice, 2012; Hernandez, Cheng, & Ice, 2012; Johnson-Taylor et al., 2008) has demonstrated that African American parents commonly misperceived body weight status for multiple reasons including poor communication between the healthcare provider and parents. Other comments stated that the parents/caregivers based their perception of their child's height and weight on others in their family and not the standards set by the CDC. Numerous studies report that African American parents frequently underestimate their child's body status (Boutelle, Fulkerson, Neumark-Sztainer, & Story, 2004; Killion, Hughes, Wendt, Pease & Nicklas, 2006; Kral, Moore, & Compher, 2014). Other studies found that parents from diverse

ethnic groups, not just African Americans, view their overweight children as being of normal weight (Gordon & Mellor, 2013; Witherspoon, Latta, Wang, & Black, 2013). However, the majority of this study's participants incorrectly placed their obese child in the overweight category. As a result of this misperception, these parents/caregivers do not acknowledge the potential complications of adult chronic diseases such as diabetes, cardiovascular disease, joint problems, and psychosocial distress. Additionally, obese adolescents face greater psychosocial challenges such as bullying, low self-esteem, and depression than parents acknowledge (Lawler & Nixon, 2011; McCormack et al., 2011; Vander, Wal, Thomas, 2004).

#### Culture and Traditions

Research (Assari, Caldwell, & Zimmerman, 2015; Rhee, Lumeng, Appugliese, Kaciroti, & Bradley, 2006; Rouche, Ensminger, Cherlin, 2007) has demonstrated a relationship between parenting behaviors and culturally influenced attitudes about child rearing. This study's participants were all female heads of their home and influenced the behaviors, attitudes, habits, and cultural norms for their household. This study explored the traditions of the African American culture by inquiring about familial practices of purchasing, preparing, and selecting the foods eaten in their homes. This study as well as other research (Alexander, Alfonso, & Hansen, 2015) confirmed that parent's dietary habits, physical activity habits, and lifestyle habits are associated with their child's weight.

Extended family members have a very active role in African American families and often influence the negative lifestyle behaviors, beliefs, and practices which contribute to childhood obesity (Dhoble et al., 2007; McGarvey et al., 2006; Pena, Dixon,

& Taveras, 2012). In this study, parents explained that extended family members such as grandparents believed that African American families should eat large meals at every holiday and family celebration. When individuals do not eat, family members tend to fear that the family member is ill. According to the literature, African American families tend to celebrate, and reward children with unhealthy food such as the "junk foods" that they prefer (Pena et al., 2012; Reed, 2013). Participants indicated that their family celebrations centered around large meals composed of unhealthy foods. It is posited that African Americans tend to provide their children with larger than appropriate portion sizes of high fat foods that taste good (Vollmer & Mobley, 2013). Sweetened beverages, sugary cereals, and fast food are examples of regular food and drink intake as expressed by participants in this study. African Americans in this study also expressed that busy lifestyles contributed to their practice of unhealthy eating habits. These unhealthy habits include consuming too much fast food and eating late in the evening (Lim, Zollner, Ajrouch, & Ismail, 2011; Vollmer & Mobley, 2013). Many participants in this study referenced picking up fast food late in the evening, after the day's activities, and then eating in the car on the way home.

Research suggests that many African Americans view genetics as a non-modifiable factor causing obesity in multiple family members (Davis, Young, Davis & Moll, 2008; Watkins et al., 2007; Davis et al., 2008; & Pena, Dixon, & Taveras, 2012). Some of the African American participants in this study expressed their perception that a larger body size is normal for their children because other relatives (and the majority of these parents) were also overweight or obese. Normal body weight was not viewed as

being healthy by the participants who reported that normal body weight would be considered skinny or as evidence that the individual was starving in their environment.

Time and Convenience

Time constraints have also been documented as contributing to childhood obesity. Time constraints are caused by full schedules including the parents' work schedule, and the child's afterschool activities and homework (Sealy, 2010a). Most study participants knew healthy foods included fresh fruit and vegetables but few provided them for their family on a consistent basis. The participants stated that they resorted to fast food as time pressures precluded shopping and preparing healthier food (Burnet et al., 2007; Pena et al., 2012; Snerthen et al., 2008). Similar explanations were given for serving children processed foods which were acknowledged to be a less healthy alternative (DiSantis et al., 2013; Hubbs-Tait, Kennedy, Page, Topham, & Harrist, 2008; Reed, 2013; Snerthen et al., 2008). Reasons given for not providing fresh produce included the perceived need for frequent trips to the grocery and the short interval prior to spoilage. Some participants mentioned that they would enjoy gardening and growing fresh vegetables, activities requiring time and work. In response to questions about what they could change to become healthier, some participants said they were willing to substitute healthier snacks such as fruit and vegetables for unhealthy snacks.

# Expenses/Finances

Despite having relatively high incomes, finances were a concern for this group of participants who repeatedly stated that healthy foods tend to be expensive. However, these concerns were never explicitly stated to be a barrier. Unhealthy foods tend to be cheaper and readily available, while fresh fruits and vegetables carry high prices and are

perceived to require frequent trips to grocery. Although the parents in this study frequently mentioned the high cost of healthy foods, they did not mention the burden imposed by other expenses such as gym memberships. Other researchers have documented access and cost as contributing to African American childhood obesity (Alexander, Alfonso, & Hansen, 2015). According to research, accessibility of healthy foods is associated with childhood BMI (Carroll-Scott et al., 2013; Leung et al., 2011; Li, Robinson, Carter, & Gupta, 2015). The majority of prior research on childhood obesity in African Americans has focused on participants with low income (James et al., 2014; Payas, Budd, & Polansky, 2010; Taveras, Gillman, Kleinman, Rich-Edwards, & Rifas-Shiman, 2010). Only a third of the participants in this study had incomes less than \$50,000. However, when asked about potential motivators for dietary change, four participants suggested financial incentives.

### Healthcare Providers

Some African American parents tend to rely on their child's healthcare provider to tell them if there is a need for concern about their child's weight. It is only at the point that a provider expresses concern that many parent will implement needed lifestyle changes (Ball et al., 2012; Cowgill et al., 2014; Reed, 2013). This study is consistent with previous research in that all the parents/caregivers reported depending on their child's primary healthcare provider to communicate any concerns about their child's well-being. This study as well as other studies (Cottrell et al., 2007; Warschburger & Kroller, 2009) showed that parents/caregivers fail to acknowledge that their overweight or obese child was at increased risk for physical and/or mental health problems associated

with childhood obesity. Although each child in this study fell in the obese category, none of the participants described a healthcare provider initiating discussion of their child's weight.

The well-being of an overweight or obese child should be at the forefront of communication between parents and the healthcare provider (Pena, Dixon, & Taveras, 2012). Most of the participants in this study felt they had good communication with their child's provider, however there had been no mention of childhood obesity or its complications. Carcone and others (2011) suggest that because African Americans parents tend to mistrust healthcare providers, they may not be fully honest on healthcare visits. This possibility was validated by a healthcare provider participant in this study stating that she is not always honest with her child's healthcare provider.

Only one parent stated that there was a time when her family was not able to afford regular physician visits. None of the parents acknowledged that obesity caused health complications and chronic diseases that could escalate healthcare costs rapidly. One child was currently diagnosed with hypertension and anxiety which the mother attributed to anxiety rather than weight. However, the literature does state that majority comorbidities of childhood obesity include hypertension, psychosocial disorders, and decreased health related quality of life (Brogan, Danford, Yeh, & Jen, 2014; Long, Mareno, Shabo, & Wilson, 2012; Pulgaron, 2013).

### Limitations

Limitations of this study include purposive sampling which was used to select participants who met the inclusion criteria of being an African American parent of an

overweight or obese child and living in the identified community. There was no male perspective given; all participants in this study were female, and all were recruited from Baptist churches. The findings can only be applied to those individuals who participated in the study and were willing to share information. Findings cannot be generalized to other African American populations due to the small sample size and may not reflect the values or beliefs of other African American communities.

Second, there were limitations in using focus groups in a modified ethnographic study. Focus groups were used to elicit discussion about childhood obesity from parents. The researcher used a structured interview to stimulate conversation among participants to explore their viewpoint on this topic (Kitzinger, 1995). The researcher was able to observe and translate knowledge obtained through focus group participants' stories, attitudes, and experiences from within a unique culture as it relates to the phenomenon being discussed (Barnett, 2002). Typically focus groups are composed of six to ten participants; this study's focus groups consisted of three participants each and were purposively selected to include participants who could participate in a discussion involving the perceptions and perspectives of African American parents in regard to childhood obesity.

The researcher encountered some difficulty in recruiting. Minority populations are known to have higher attrition rates than Caucasians; however, this researcher had difficulty with recruiting rather than retention (Carcone, MacDonell, Naar-King, Ellis, Cunningham, & Kaljee, 2011). There appeared to be numerous caregivers with overweight or obese children in these faith-based congregations but only one or two from each facility made initial contact or approached the researcher. The researcher

approached some potential participants by handing them a flyer with brief conversation. Some potential participants did not follow-up with the researcher. Other potential participants provided reasons for not participating including questions related to being singled out for having a child who appeared to be obese. There were also limitations based on socioeconomic status of participants. Most (66.7%) of the participants had an income of \$50,000.00 or more; only a third of the participants were of low socioeconomic level status. Therefore, findings cannot be generalized to all economic levels of the African American population.

#### Conclusions

This study reports data collected from 15 parents/caregivers of obese children participating in five, semi-structured focus group sessions on the phenomenon of childhood obesity. Four themes emerged from the analysis of the transcripts: false perception or denial, time and convenience, culture and traditions, and finances/expenses. The participants in this study described their view of obesity in terms of appearance, functionality, and family norms rather than relying on medically determined standards. They also believed that if there was a "true" problem with their child's weight they would have been informed by their healthcare provider. Many participants also believed that their heritage justified their beliefs that their body size was normal. Participants noted that lifestyle behaviors were inherited or passed down from their families. They also noted that recent societal changes have encouraged unhealthy habits. For example, increasingly busy lifestyles have increased eating on the go instead of acquiring and preparing fresh fruits and vegetables while busy schedules for both adults and children

have decreased available time for proper exercise. Lastly, the availability of electronic activities has increased sedentary activities. Money and time were repeatedly mentioned as barriers to supplying children with healthier foods, providing time and opportunity for regular exercise, and decreasing sedentary activities.

The only theme to emerge that was unique to the African American culture was culture and traditions; while the others important themes can be applied to any culture. Participants expressed that the African American culture itself is a major contributing factor to childhood obesity. These findings reflect the continuous beliefs, values, and traditions planted in the culture as it relates to their views of reality related to the phenomenon of childhood obesity. As healthcare providers, we must acknowledge the cultural aspects of patient's choices, understand the culture as it relates to lifestyle behaviors, and explore modifiable interventions to change those behaviors that are acceptable within the African American culture. The National Council of State Boards of Nursing has recently added culture and spirituality to the updated 2016 National Council Licensure Exam-Registered Nurse (NCLEX-RN) Test Plan. Healthcare providers must become well-acquainted with cultural aspects and beliefs of African American as they relate to acknowledging, communicating, and treating childhood obesity. There must be open and honest communication among the healthcare provider and parents that is objective and without any cultural biases. We, as healthcare providers, must understand the viewpoint and realities of the African American family. Health care providers can utilize faith-based organizations to deliver effective education and implement programs that will benefit African Americans.

This study's population differed from rural African American participants in previous research in having both higher than expected income and education. However, these participants described beliefs similar to those reported by participants from low SES poorly educated African Americans living in rural areas (Pan et al., 2012; Scott & Wilson, 2011). It is possible that these participants were reared in lower SES households by parents with limited education. Although, these participants are better educated and have higher incomes, they appeared to return to their roots with regard to issues of food and weight for their children.

# Implications for Clinical Practice

Recommendation for clinical practice based on the data (i.e. problem of trust in relationship) include further education for providers on cultural diversity of African Americans such that every effort is made to consider the physical needs, culture, faith-based practices and a trusting relationship of the population being treated. Healthcare provides need to be cognizant of African American culture when providing education. Furthermore, education and other motivating factors need to be considered when implementing future weight control interventions for African Americans. African Americans need culturally appropriate education on risk factors for obesity-related conditions as well as the disproportionate incidence and consequences of childhood obesity in African Americans. Implementing programs through faith-based facilities and organization will be useful in meeting cultural needs of this ethnicity. The collaboration of healthcare providers, parents/caregivers as well as the child is needed to acknowledge, alter, and implement life-long behavioral changes.

## Implications for Policy

This study confirmed the need for governmental agencies, state and federal, to fund initiatives aimed at reducing childhood obesity in Mississippi. Also, governmental agencies must work together to institute specific strategies to encourage healthy behaviors in minorities. Healthcare providers need additional guidance on assessing for obesity, reimbursement codes, and making referrals for nutritionist. Most mandates have occurred in the public-school system for all children and while an encouraging start, there is significant need for minority-specific interventions. With this being the case, churches would be the ideal settings for these strategies to have a significant impact. For example, such alliances as the Beverage Initiative could be expanded throughout the State of Mississippi with a focus in African American churches.

### Recommendations for Future Research

Future research is needed to address all the themes uncovered by this dissertation. This study identified a false perception or denial of body weight status by rural African American parents/caregivers and a distrust of medically established recommendations regarding weight. Future research is needed to explore educational interventions aimed at African American parents pertaining to childhood obesity and its impact to acute and chronic illnesses. Future studies should specifically include clarifications of the CDC's standards of body weight for children presented in a culturally acceptable manner in order to enhance trust. Interventions should stress the importance of planning and preparing meals in advance to avoid the convenient use of fast food restaurants, better choice-selection when eating at restaurants, label reading to make healthier choices, and alternate choices for unhealthy lifestyle behaviors that are focused toward the African

American population. Additionally, interventions targeted at African American children are also needed.

Study participants offered suggestions for feasible interventions to assist their children in obtaining a healthy weight. Suggestions included family-focused interventions, limiting sedentary behaviors, exercising with their child, and providing healthier snacks. Future research would facilitate the design and testing of an intervention to assist these parents with making such modifications. More research is also needed to determine what will motivate African American families to make healthier lifestyle choices.

This study identified the influence of extended family on parents/caregivers decisions related to food. Future studies are needed to explore the attitudes of extended African American family members and to assess their health beliefs and perceptions on childhood obesity. Parents, the change agents for families, control the purchasing and preparation of food, the feeding routines, and the lifestyle behaviors of their households; therefore, it is imperative to understand the motivating factors for lifestyle change in the African American culture to ameliorate childhood obesity in this population.

Interventions aimed at implementing life-long healthy lifestyle habits in African Americans will need to include cultural traditions, culturally appropriate educational materials and family support. Such future interventions should include education regarding parenting practices, and developing a trusting rapport with healthcare providers. Positive support for healthier lifestyle behaviors such as healthier foods, regular physical activity, limited sedentary behaviors and other modifiable-cultural behaviors can reduced the incidence of childhood obesity in African American children.

Lastly, better communication between healthcare providers and parents of overweight or obese children is needed. The parents in this study acknowledged their dependence on the healthcare provider to communicate the implications of their child's body weight. However, none of the parents reported that healthcare providers had communicated potential complications regarding body weight or health status. It is imperative that parents/caregivers be given accurate information related to their child's body weight and health status in a culturally sensitive manner. Parents need to be made aware that a family history of obesity and/or current parental obesity predisposes the child to obesity and complications. Healthcare providers need to be aware that when overweight or obese family members visit their offices with children who are also overweight or obese and that these parents are unlikely to be concerned with weight status of the child. Providers need to use the clinic visit as an opportunity to start a conversation and implement change. In conclusion, pediatric healthcare providers fail to communicate accurate health-related information to parents/caregivers of overweight African American children. Providers for this population need to incorporate cultural diversity, develop a trusting rapport, and create a climate of collaboration with parents to combat childhood obesity in African American children.

The next step for the researcher is to disseminate this research through research articles and presentations. The researcher plans to write and submit a small pilot grant to return to the church population in the study and teach about healthy lifestyle behaviors through the healthcare ministries. Teaching will include general knowledge about BMI, diet and nutrition, physical activity starting with walking, limit-setting with sedentary behaviors, and how to initiate communication with the child's healthcare provider about

their child's body weight. Funds will be used to assist with educational materials and bringing experts to assist with cultural differences.

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# APPENDIX A INSTITUTIONAL REVIEW BOARD APPROVAL



Institutional Review Board for Human Use

Form 4: IRB Approval Form Identification and Certification of Research Projects Involving Human Subjects

UAB's Institutional Review Boards for Human Use (IRBs) have an approved Federalwide Assurance with the Office for Human Research Protections (OHRP). The Assurance number is FWA00005960 and it expires on January 24, 2017. The UAB IRBs are also in compliance with 21 CFR Parts 50 and 56.

Principal Investigator:	AUSTIN, ALICE M	
Co-Investigator(s):		
Protocol Number:	X150821003	
Protocol Title:	Africian American Childhood Obesity: The Parent's Perspective	
UAB's Assurance of Co	approved the above named project on 10-5-15. The review was conducted in accordance with ampliance approved by the Department of Health and Human Services. This Project will be subject view as provided in that Assurance.	
This project received E	KPEDITED review.	
IRB Approval Date: 10	-5-15	
0		
IRB Approval No Longer Valid On: 10-5-16 Mariem Date 18 Approval No Longer Valid On: 10-5-16		
	Member - Institutional Review Board for Human Use (IRB)	
Investigators please not		

The IRB approved consent form used in the study must contain the IRB approval date and expiration date.

IRB approval is given for one year unless otherwise noted. For projects subject to annual review research activities may not continue past the one year anniversary of the IRB approval date.

Any modifications in the study methodology, protocol and/or consent form must be submitted for review and approval to the IRB prior to implementation.

Adverse Events and/or unanticipated risks to subjects or others at UAB or other participating institutions must be reported promptly to the IRB.

470 Administration Building 701 20th Street South 205.934.3789 Fax 205.934.1301 irb@uab.edu The University of Alabama at Birmingham Mailing Address: AB 470 1720 2ND AVE S BIRMINGHAM AL 35294-0104

# APPENDIX B CONSENT FORM FOR PARENTS

TITLE:

UAB IRB PROTOCOL NUMBER:

X15021003 **UAB School of Nursing** 

SPONSOR:

#### CONSENT FORM

African American Childhood Obesity: The Parent's Perspective

African American Childhood Obesity: The Parent's Perspective

Participant: Focus Group

Principal Investigator:

Alice Austin, RN, MSN

Locations:

09/22/2015

Bovina Community Center

Grove Street Baptist Church

Merit Health

Introduction: You have been invited to participate in a research study. The purpose of this study is to understand parental perceptions, cultural beliefs, values, behaviors, and factors that contribute to childhood obesity in African American families residing in Mississippi. A maximum of 50 parents/caregivers will be recruited to participate in focus groups of 5 participants each. A maximum of 50 overweight or obese children of these parents will be selected to participate in the initial phase of

Procedure: If you agree, you will be asked to participate in a group discussion about your perceptions, experiences, beliefs, and lifestyle behaviors related to overweight or obese children and its effects. The discussion will last approximately 11/2 -2 hours and will be audio-recorded. The recordings will be reviewed by the researcher to gain a full understanding of your experiences.

Risks and Discomforts: There are no known risks associated with participating in this study, although you may feel awkward talking about your perspectives. There is a risk of a loss of confidentiality in the group session. Please feel free to share your questions or concerns with researcher before, during, or after the group discussion.

**UAB IRB** 

Date of Approval 10-5-15

10-5-16 Not Valid On

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**Benefits**: You will not benefit directly from participating in this study; however, you may feel better after talking about your feelings. Additionally, what is learned from the discussions may help other people in the future.

Confidentiality: All information including recordings and documents will be kept as confidential as possible under local, state, and federal laws. However, research information that identifies you may be shared with the UAB Institutional Review Board (IRB) and others responsible for ensuring compliance with laws and regulations related to research, including people of the Office for Human Research Protections (OHRP). No personal information will be used except for this consent form, which will be protected and you will be identified with numbers and letters for all other documents. By signing this consent form, you permit the use of any data collected for this research study but your identity will remain unknown. The information from the research may be published for scientific purposes; however, your identity will not be given out.

#### Voluntary Participation and Withdrawal:

Whether or not you take part in this study is your choice. You can refuse to participate or withdraw from this study at any time without penalty. If for any reason you wish to withdraw, call me Alice Austin, at this number 601 831-1739.

Cost of Participation: There will be no cost to you for taking part in this study.

Payment for Participation in Research: You will receive a \$10 Walmart gift card purchased by the PI for your participation at the conclusion of the focus group session

Questions: If you have questions about the study, you may call Alice Austin at 601-831-1739. If you have questions about your rights as a research participant, or concerns or complaints about the research, you may contact the Office of the Institutional Review Board for Human Use (OIRB) at the University of Alabama at Birmingham (UAB) at 205-934-3789 or toll free at 1-855-860-3789. Regular hours for the OIRB are 8:00 a.m. to 5:00 p.m. CT, Monday thru Friday.

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Legal Rights: You are not waiving any of your legal rights by signing this informed consent					
document.					
Consent					
I have read the information on this form. All of my questions about the study have been answered to					
my satisfaction. I will be given a copy of this signed form	to keep for my records. I voluntarily agree to				
participate in this study.					
Participant's Name					
Participant's Signature	Date				
Alice Austin, RN, MSN PRINCIPAL INVESTIGATOR (PI):					
Principal Investigator Signature	Date				

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# APPENDIX C ASSENT CONSENT FORM

TITLE:

UAB IRB PROTOCOL NUMBER:

SPONSOR:

African American Childhood Obesity: The Parent's Perspective

X15021003

Alice M. Austin, RN, MSN **UAB School of Nursing** 

### ASSENT CONSENT FORM

### African American Childhood Obesity: The Parent's Perspective

My name is Alice Austin and I go to school at the University of Alabama at Birmingham. I am doing a study on childhood obesity and I am asking if you will be a part of my study. Your parent/caregiver knows I am asking you to do this and it is ok with them. Your parent/caregiver and I will be the only ones who will know this information.

Here's what will happen:

09/22/2015

- 1. I will weigh you on a scale.
- 2. I will use a measuring tape to get your height.
- 3. I will write down your birthdate to help me determine how old you are and compare it to your weight.
- 4. Doing all this will take about 5 minutes.

Do you have any questions about this? You can ask me or your parent now or at anytime.

Your Name (Printed)	Age  Date	
Your Signature		
Principal Investigator Signature	Date	
	UAB IRB	
	Not Valid On 10-5-16	
	Not Valid On 10-5-16	

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# APPENDIX D LETTERS TO CHURCH LEADERS

### Letter to Churches

108 Lena Drive

Vicksburg, MS 39183

Date

Pastor's Name

Church Address

Vicksburg, MS 39183

RE: Members Participating in Research Opportunity

My name is Alice Austin and I am a doctoral student in the School of Nursing at University of Alabama in Birmingham. I would like to come to your church and talk to some of your members about my project on childhood obesity in African Americans. As you know, African American children and adolescents tend to have the highest incidences of obesity in Mississippi leading us to be known as the fattest state in the United States. Childhood obesity can cause children to have adult diseases such as diabetes, high blood pressure, and other health problems. I would like to talk with African American parents/caregivers in your congregation to get their perspective on childhood obesity. I am also asking to post recruitment flyers on your bulletin board and to post a recruitment notice in your church bulletin.

Thank you for considering to give your church members an opportunity to participate in my research. I can be contacted at 601 636-6320.

Thanks,

Alice Austin, RN, MSN

UAB, School of Nursing

**Doctoral Student** 

# $\label{eq:appendix} \mbox{APPENDIX E}$ $\mbox{RECRUITMENT FLYER}$

### Recruitment Flyer

### **VOLUNTEERS NEEDED**

Looking for parents to participate in a

Focus Group Research Study

You may be eligible to participate in a small group discussion on Childhood Obesity in

African Americans

### To Qualify or Participate:

### MUST BE AFRICAN AMERICAN and HAVE AT LEAST ONE CHILD



**AGED 6-19** 

BE AVAILABLE TO MEET AT ONE OF THE

FOLLOWING PLACES ON THE SPECIFIED DATES

- BOVINA COMMUNITY CENTER
- MERIT HEALTH-RIVER REGION
- AFRICAN AMERICAN CHURCH
  - DATES/TIMES TO BE ASSIGNED
- IF INTERESTED, PLEASE CONTACT ALICE AUSTIN AT 601-831-1739 FOR FURTHER DETAILS

There will be compensation for your time.

# APPENDIX F SOCIODEMOGRAPHIC FORM

### Demographic Form

		Identification (number/letter)		
Please answer the following questions. Complete the blanks or check the boxes next to				
the category that best describes your situation.				
1.	What is your date of birth?	//		
2.	What is your child's date of birth	//		
3.	Child's Gender:	MaleFemale		
4.	. What is your current relationship status?			
		Never Married		
		Married		
		_Living with partner in committed relationship		
		Separated		
		Divorced		
		_widowed		
5. What is the highest grade in school that you completed?				
		_Some high school		
		_High school grad/GED		
		_Some college/Technical degree/AA		
		College degree (BA/BS)		
		_Advanced degree (MA, PhD, MD)		

6.	6. What is your current occupational status?		
		Homemaker	
		Unemployed	
		Retired	
		On disability	
		Full-time employed	
		Part-time employed	
		Full-time Student	
7.	What is your family househo	old income (from all sources):	
		less than \$20,000	
		between \$20,000 and \$49,999	
		between \$50,000 and \$99,999	
		\$100,000 or more	
8.	3. What is your perception of your child's body weight? Mark your child's b		
	weight?		
		Normal	
		Overweight	
		Obese	
		Morbid Obese	
9.	Child's actual weight is	lbs	
	Child's height is		
	Child's BMI is		

# APPENDIX G INTERVIEW GUIDE

### Interview Guide

- 1) What constitutes a healthy diet for your family?
- 2) What do you believe represents being physically fit?
- 3) What does a healthy child look like to you?
  - a. How do you decide if your child is overweight or not?
  - b. How do you decide if your child is healthy or not?
- 4) Do you perceive your child's body weight as a health risk? If so, How do you know your child's health is related to their body weight?
- 5) What are the signs you look for that a child is developing a weight problem?
- 6) What are the risk factors that you believe that have contributed to your child's body weight?
- 7) What relationship do you perceive that diet and exercise have on your child's bodyweight?
- 8) What would you do to help a child lose weight? What do you think will make a difference?
- 9) What do you believe is your role in discussing childhood obesity with your healthcare provider?
- 10) How many total hours in a day do you feel is adequate for a child to engage in computer usage, electronic games, and watch television?
- 11) What do you believe are limitations/barriers against healthy eating & exercise?
- 12) What do you believe would help or motivate you and/or your family to practice eating more fruits and vegetables, cut back on fast foods, perform some sort of physical activity at least 5 times a week and limit the amount of time your child spends watching television, on electronics and computer usage?

# APPENDIX H IRB RENEWAL



Institutional Review Board for Human Use

Form 4: IRB Approval Form Identification and Certification of Research Projects Involving Human Subjects

UAB's Institutional Review Boards for Human Use (IRBs) have an approved Federalwide Assurance with the Office for Human Research Protections (OHRP). The Assurance number is FWA00005960 and it expires on January 24, 2017. The UAB IRBs are also in compliance with 21 CFR Parts 50 and 56.

Principal Investigator: AUSTIN, ALICE M

Co-Investigator(s):

Protocol Number:

X150821003

Protocol Title:

Africian American Childhood Obesity: The Parent's Perspective

The IRB reviewed and approved the above named project on Policy. The review was conducted in accordance with UAB's Assurance of Compliance approved by the Department of Health and Human Services. This Project will be subject to Annual continuing review as provided in that Assurance.

This project received EXPEDITED review.

IRB Approval Date: 9-21-16

Date IRB Approval Issued: 912110

IRB Approval No Longer Valid On: 9/21-17

Many Day

Expedited Reviewer

Member - Institutional Review Board

for Human Use (IRB)

### Investigators please note:

The IRB approved consent form used in the study must contain the IRB approval date and expiration date.

IRB approval is given for one year unless otherwise noted. For projects subject to annual review research activities may not continue past the one year anniversary of the IRB approval date.

Any modifications in the study methodology, protocol and/or consent form must be submitted for review and approval to the IRB prior to implementation.

Adverse Events and/or unanticipated risks to subjects or others at UAB or other participating institutions must be reported promptly to the IRB.

470 Administration Building 701 20th Street South 205 934,3787 Fax 205 934,1301 irb@uab.edu The University of Alabama at Birmingham Mailing Address: A8 470 1720 2ND AVE 5 BIRMINGHAM AL 35294-0104