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EXPLORING THE OBESITY-RELATED LIFESTYLE ATTITUDES AND BEHAVIORS OF
AFRICAN-AMERICAN WOMEN AND AFRO-CARIBBEAN IMMIGRANT WOMEN IN
METRO ATLANTA, GEORGIA

by

MELANY M. CHAMBERS

Under the Direction of Holley Wilkin, PhD

ABSTRACT

Background. Obesity has been associated with a number of negative health consequences (e.g., hypertension/heart disease, type-2 diabetes, osteoarthritis, and respiratory illnesses). Despite health communication campaigns to reduce overweight/obesity by encouraging lifestyle changes (e.g., eating healthier foods and exercising), the rates of overweight and obesity levels have continued to rise. Studies indicate that the rate of overweight and obesity in the U.S. is highest among Blacks. Messages targeted toward “Blacks” (African-Americans) in the United States treat this segment of the population as a homogenous group and fail to account for within-group cultural differences. Cultural values and beliefs related to food, physical activity, and ideal body size may contribute to overweight and obesity.

Objective. This study was designed to gain a deeper understanding of the similarities and differences between African-American and Afro-Caribbean immigrant women living in the

Metro Atlanta, Georgia, in terms of the role that culture and social environments play in forming obesity-related—food, physical activity, and body image—attitudes, values, and behaviors.

Method. A social cognitive theory (SCT) framework informed the design of semi-structured interview guides. Study participants were comprised of 13 African-American women and 12 Afro-Caribbean women who recently immigrated to the United States from English-speaking countries. All participants were living in Atlanta, Georgia at the time of the study. They were recruited through convenience and snowball sampling and interviewed between October 5 and December 26, 2014. Data from audio-recorded in-depth interviews were transcribed and analyzed using textual analysis software package NVivo9.

Results. African-American and Afro-Caribbean participants were similar in terms of some food-, physical activity- and body-image related attitudes and behaviors. Health-related concerns and matrilineal influence affected the food-related behaviors of both groups of participants. Physical activity and body image-related attitudes and behaviors of women in both groups were affected by the norms of their childhood and current social environments. Although a healthy physical activity lifestyle was important to women in both groups, not all women were consistently physically active.

The study also revealed some differences between African-American and Afro-Caribbean participants. In general, the African-American women described the food-related norms of their childhood environments in negative terms and were more likely to have changed their food-related behaviors for health reasons. The Afro-Caribbean women described their childhood food-related norms in positive terms, and thus, strove to maintain healthy behaviors from their childhood. The norms of the current social environments of African-Americans, but the childhood social environments of Afro-Caribbean participants, influenced them more toward

healthier food-, physical activity- and body image-related attitudes and behaviors. In terms of body ideals, Afro-Caribbean women typically identified a smaller “ideal body size” than African-American women. African-Americans from the South, or those with parents from the South tended to choose larger figures than women from the North.

Conclusion. Consistent with other SCT studies, this study found attitudes and behaviors that were consistent with those modeled within the participants’ social environments. There are more cultural differences than similarities between African-American and Afro-Caribbean women. The similarities and differences revealed in this study have implications for the design of culturally relevant obesity-related messages.

INDEX WORDS: African-American women, Afro-Caribbean immigrants, Culture, Cultural competence, Culturally-relevant message design, Obesity, Social cognitive theory

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MELANY M. CHAMBERS

A Dissertation Proposal Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

in the College of Arts and Sciences

Georgia State University

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December, 2015

DEDICATION

This dissertation is dedicated to those who helped me traverse this path. First, to my Lord and Savior, Jesus Christ. Without Him and His love for me, none of this would have been possible. I believe He has eternal purpose in everything He allows. I, therefore, believe He has purpose in every aspect of my experiences as I progressed through this PhD program and through the development of this dissertation. I dedicate this dissertation, first, back to Him.

Second, to my mother, Loris Rerrie, and brother, John Rerrie, who both went home to be with the Lord too soon for me. Notwithstanding this, I trust His plan. I thank my mother for enduring the struggles as a single parent and for giving sacrificially of herself to help me and my siblings grow to be contributing members of society. I thank the Lord for my brother. He remains the best human being I have ever known in my entire life! Third, I thank, and dedicate this dissertation to, my aunts, HB Johnson, Lyn Salmon, and Edith Cockburn, who loved my siblings and me. Without their love and help to my mother, there is no telling what would have happened to us.

Fourth, I dedicate this dissertation to my children—Marsh, Nicks, and Matt—to my delightful grandsons and my adorable grand-daughter, and to my sisters, Judith and Charmaine. Not only are they constant reminders of the importance of this work, but they kept me going with their prayers, love, and patience during all the times I was unavailable to them because I was “writing.” Fifth, I dedicate this to my nephew, N’Kantu Johnson, who was my first “son.” My heart still grieves at losing Kan in June of last year. I will always remember his smile as he would ask, “Auntie-Mummy, how is it going? When will you be done?” I am sorry that he is not

here on earth now to see the final paper, but I look forward to our celebration when we meet again in heaven with my mother and brother in the presence of Our Lord.

Sixth, I dedicate this to all my other relatives and friends. Your encouragement and prayers kept me buoyed and going when the going got tough! Special thanks to my praying friends: Carolyn Walker, Maggie Obeng-Akrofi, Michie Faina, Donna MacLeish, Roy Russell, Pastor Emanuel Williams, and JP Clay. Thank you also, to Dr. Teresa Morales, Dr. May Fawaz-Huber, and other Georgia State University colleagues and friends who walked this road before me, yet, cared enough to look back.

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1 INTRODUCTION

1.1 Statement of the problem

Over the past few decades, research has focused on addressing the public health implications of the rising rates of overweight and obesity worldwide and in the U.S. The World Health Organization (WHO) defines overweight and obesity as abnormal or excessive fat accumulation that may affect health negatively (2013). Body Mass Index (BMI), a measure of an individual's weight to height ratio, is thought to provide a reliable indicator of body fatness. Overweight and obesity are depicted medically in terms of BMI's above 24.9, and 29.9, respectively (Center for Disease Control (CDC), 2012a; WHO, 2013). To put this in context, a woman who is 5'4" is considered overweight if she weighs between 145 and 173 pounds and obese if she weighs above 174 pounds. Extensive National Institutes of Health (NIH)/WHO studies have linked premature death to higher BMI's (Brewis, 2011).

Individuals classified as overweight are deemed to be at increased risk of several diseases, while those classified as obese, are thought to be at increased risk of both disease and death (Brewis, 2011; CDC, 2012a). Overweight and obesity have been associated with physical, mental, and emotional health problems (CDC, 2012a). Consequences to physical health include chronic illness such as coronary heart disease, hypertension, type 2 diabetes, certain cancers, sleep apnea, osteoarthritis, reproductive problems (e.g., increased risk of spontaneous abortion, multiple-fetus pregnancies, and infertility), osteoporosis, gall bladder disease, and respiratory problems (Brewis, 2011; CDC, 2011a; Phelan, 2009; Shaper, 1996). Overweight and obese individuals also suffer from mental and emotional issues, such as depression and self-esteem issues associated with body size (Chesney, Thurston, & Thomas, 2001).

Additionally, there are social costs associated with overweight and obesity. Individuals are often stigmatized and subjected to injustices with which their counterparts of lesser weight do not have to contend. For example, social rejection may result in undue challenges (e.g., difficulty finding a mate or a job) and lack of social agency (e.g. being overlooked for job promotions or pay increases) (Brewis, 2011). Additionally, these individuals are stereotypically depicted as lazy and slovenly (Schevy, Puhl, & Brownell, 2011). The conditions of overweight and obesity also have other adverse implications for affected individuals, communities, and society in general (Nguyen & El-Serag, 2010). In 2008, the “obesity toll”—worker absence and morbidity costs, and reduction in on-the-job productivity—for U.S. adults exceeded \$147 billion (CDC, 2011a). This figure represents the costs related to prevention, treatment, and morbidity, and income lost from premature death associated with overweight and obesity (CDC, 2011a).

1.1.1 Obesity trends

Despite many studies and interventions to address growing concern about obesity in the U.S. (e.g., Barry, Gollust, & Niederdeppe, 2012; Ebbeling et al., 2012; Enwald & Huotari, 2010; Sturm & Hattori, 2013), overweight and obesity levels have risen consistently, and are projected to get worse in the near future. According to the CDC (2012a), in 2009-2010, more than 33.3% of adults were overweight and 35.9% were obese; this accounted for over two-thirds of the U.S. adult population. In the period from 1999-2009 the prevalence of obesity among women was consistently higher than among men (Brewis, 2011; Ogden, Carroll, Kit, & Flegal 2012). The most recent data shows that in 2009-2010, 37.5% of men and 40.6% of women were obese (Ogden et al., 2012). Projections suggest that by 2020 the proportion of the US population classified as normal weight in 2005 will decline by 35%, and that almost half of the population (45%) will be classified as obese (Stewart, Cutler, & Rosen, 2009). Even more alarming are

projections by Wang, Beydoun, Liang, Caballero, and Kumanyika (2012) that estimate if the current trends continue, by 2030, 86.3% of U.S. adults will be overweight or obese. These projections also estimate that 96.9% of African-American women will be overweight or obese by 2030. They further projected that if the current trends continued all Americans would be overweight or obese by 2048, and all African-American women by 2034. Concern about this trend has led to research focused on strategies to stymie projected obesity levels.

1.1.2 Need for culturally-tailored obesity prevention

Many overweight- and obesity-prevention campaigns have addressed individual-level behavior change regarding food and exercise (e.g., Ajzen, 1991; Dzewaltowski, Noble, & Shaw, 1990; Gardner, & Hausenblas, 2006; Gatch, & Kendzierski, 1990; Omondi, Walingo, Mbagaya, & Othuon, 2011). Such approaches, however, do not sufficiently (if at all) consider the effects of family and other personal influencers (Sallis & Owen, 2002; Thomas, Hyde, Karunaratne, Herbert, & Komesaroff, 2008). Some authors (e.g., Coreil, 2009; Komesaroff & Thomas, 2007; Puska et al., 1985; Renzaho, 2004; Ristovski –Slijepcevic, Bell, Chapman, & Beagan, 2010; Rozin, 2006; Thomas et al., 2008) have called for more multidimensional approaches, including considering the impact of sociological and psychological factors contributing to obesity. Sociological and psychological factors include group cognitions and behaviors, which are learned through socialization and passed on over time (Coreil, 2009). Multidimensional approaches help to explain how these group-level sociological and psychological factors influence particular perceptions and behaviors for a group (Coreil, 2009). Komesaroff and Thomas (2007) are even more specific in their recommendation for an approach that incorporates sociological and psychological factors. They add that a differentiated culturally sensitive approach—one that considers differences in experiences, norms, values, beliefs, and behaviors

and related influences (Di Noia, Furst, Park & Byrd-Bredbenner, 2009)—toward dealing with the problem of overweight and obesity is needed. Such approaches may also be helpful in addressing individuals who may have multiple identities. For example, African-American women may identify primarily as being of African descent or as Americans. Similarly, Afro-Caribbean immigrant women may identify primarily as Caribbean, American, of African descent, or as immigrants. Therefore, there are multiple ethnicities or cultural groups with which these women may identify. According to Vardeman-Winter, Jiang, and Tindall (2013), multiple identities co-construct lived experiences. Their 2013 study found that women made decisions based on multiple identities and that where intersecting identities were ignored the women were likely to reject health messages. This study therefore seeks to understand the role of sociocultural influences of the intersecting identities of African-American women and Afro-Caribbean immigrant women in obesity-related attitudes and behaviors.

1.2 The study

This study responds to the calls of Coreil (2009), Komesaroff and Thomas (2007), and others to conduct research that considers the sociological factors that contribute to obesity. The goal of culturally sensitive approaches, in general, is to incorporate various aspects of the cultural context into health communication messages, thereby improving the relevance and persuasiveness of the messages for specific audiences (Resnicow, Baranowski, Ahluwalia, & Brathwaite, 1999). Compared to messages aimed at a more general or mainstream audience, health information that has been encoded for cultural appropriateness may be more successful in affecting behavior changes in the group to whom these messages are targeted (Kreuter & Houghton, 2006). Many of the overweight- and obesity-related studies, interventions, and messages fail to account for cultural perceptions about body size, as well as beliefs and customs

related to food preparation and exercise behaviors; this may jeopardize message relevance and effectiveness (Renzaho, 2004; Ristovski-Slijepcevic et al., 2010).

Culturally appropriate messages are designed to strategically account for culture-specific factors that influence the health behaviors of a target audience (Kreuter, Lukwago, Bocholtz, Clark, & Sanders-Thompson, 2003). Here, cultural factors refer to the values, beliefs, behaviors, and meanings that are shared by a group of people about their life and the world (Lai, Tsang, Chappell, Lai, & Chau, 2007). Renzaho (2004) points out that in some parts of the world, and in certain groups within the U.S., larger bodies are associated with success and good health. Ignoring such cultural values may result in rejection of messages designed to address overweight and obesity.

Organized around a social cognitive theory (SCT) framework, this study employed a phenomenological approach to garner deep-structure understanding of the role culture plays in obesity-related beliefs and behaviors for African-American and Afro-Caribbean immigrant women. These two cultures have been chosen because most studies have treated Afro-Caribbean women as a part of the African-American demographic, with no attempt to discover possible cultural differences between the two groups (Fitzgibbon et al., 2008). This study was designed to compare the two groups in terms of culture-specific beliefs and values that contribute to obesity-related attitudes and behaviors in female African-Americans and Afro-Caribbean immigrant women living in the U.S. More specifically, the study was conducted to compare how their values, attitudes, beliefs, shared meanings, and cultural norms inform and influence obesity-related factors such as eating, exercise behaviors, and body size.

Culture is a factor that affects overweight and obesity in several different ways. First, cultural identity and cultural activities are often expressed through food (Cosgriff-Hernandez,

Martinez, Sharf, & Sharkey, 2011). Culture is the main stimulus in food choices among humans (Rozin, 2006). It influences the types of food consumed, food preparation methods, and the amount of food consumed (Bramble, Cornelius, & Simpson, 2009). Therefore, it is surprising to find that there is such a paucity of culturally sensitive obesity-related food campaigns. Second, research has shown that larger bodies are perceived as more desirable and as symbols of health and attractiveness for certain ethnicities—e.g., Blacks and Latino groups (Fujioka, Ryan, Agle, Legaspi, & Toohey, 2009; Ristovski-Slijepcevic et al., 2010). Third, attitudes toward physical activity may be influenced by culture, thus affecting body size (Bramble et al., 2009). For example, in some cultures, if a woman chooses to exercise on a regular basis she is accused of being selfish, putting herself ahead of her family; time that she should be devoting to take care of the family is instead being used for exercising (Phelan, 2009). Acknowledgement of these and other cultural influences on perceptions of body weight, eating, and exercise behaviors is a necessary prerequisite for designing culturally appropriate health messages (Brewis, 2011; Davidson & Knafl, 2006).

Notwithstanding the value of acknowledging sociocultural differences among ethnicities, it is erroneous to assume that all members within any ethnic group are the same (Lai et al., 2007). Invariably, and particularly for minority groups, such an assumption leads to “one-size-fits-all” programs which do not address the needs of sub-groups within an ethnic group (Lai et al., 2007). Obesity-related studies and interventions that have incorporated culture have generally tailored such work to a specific race or ethnic group, rather than subgroups. Additionally, many of these efforts have focused on Whites and African-Americans and by far, the majority of these studies have been conducted with female undergraduate students (Brewis, 2011). In obesity-related studies that have researched White or African-American populations, each of these

groups has been treated as culturally homogeneous. As a result, cultural differences linked to obesity-related knowledge, attitudes and behaviors within sub-populations of these groups have not received sufficient attention (Padgett & Biro, 2003; Phelan, 2009). What is referred to as the African-American population, for example, is actually comprised of people from several different backgrounds. Yet, many obesity-related interventions (e.g., Fitzgibbon et al., 2008; James, Pobee, Oxidine, Brown, & Joshi, 2012), are designed without sufficient attention to intra-ethnic cultural differences.

Underscoring this limitation is the fact that in other studies, race and ethnicity have been too often used as proxies for culture, resulting in undermining the significance of culture (Singer, 2012). The different cultures within a larger ethnic group are defined by values and symbolisms (Krueter et al., 2003). Acknowledging these intra-ethnic differences may lead to identifying varying health attitudes, beliefs, and behaviors within ethnic groups. For this reason, ascertaining the values and symbolisms that are integral to a cultural group and understanding how they relate to health behavior can inform the design of more relevant interventions and messaging tailored for the various sub-groups (Kreuter et al., 2003).

Cultural subgroups within a population may be classified based on biological and/or social constructs. One of the taxonomies used in studying obesity in the U.S. is citizenship and immigration status (Singh, Kogan, & Yu, 2009). The immigrant population is the fastest growing group within the U.S. population, increasing by 29.8% between 2000 and 2011; this continues the significant growth trend of the previous ten years (Migration Policy Institute, 2013). In 2005, two-thirds of foreign-born African-Americans in the U.S. were born in the Caribbean and other Latin American countries. Additionally, of all the African-Americans in the U.S., the foreign-born proportion increased from 1% to 8% between 1980 and 2005 (to 2,815,000 persons) (Kent,

2007). A similar trend has existed in the state of Georgia, where the immigrant population grew from 2.7% in 1990 to 7.1% in 2000, and was 9.6% of the state's population in 2011 (U.S. Census Bureau, 2013). In 2011, 13.3% of residents in Metro Atlanta reported as being foreign-born (U.S. Census Bureau, 2013).

Various factors highlight the importance of studying immigrants. First, this population is very diverse today; immigrants come to the U.S. from every region on Earth, resulting in a general population with more cultural variety than ever before. Despite the consistent growth and diversity in the immigrant population, relatively few studies have examined the various subgroups within this general population. For example, some immigrants come to the U.S. in better health than their local counterparts, but lose this status after living here for a number of years (Edberg, Cleary, & Vyas, 2011). This phenomenon is now generally referred to as the immigrant health paradox—immigrants' relatively good health drastically deteriorates as the length of time they have lived in the U.S. increases (Fennelly, 2005). The importance of studying differences within the immigrant population is supported by the findings of Franzini, Ribble, and Keddie (2001) that the health paradox varies between Hispanic subgroups.

Second, in general, compared to their native-born counterparts, immigrants are disproportionately susceptible to health-risks and to diseases such as cancer, heart disease, and strokes, all associated with obesity (Kreps & Sparks, 2008). Some of the reasons posited for these disparities are related to minority issues, culture, and economics. They include discrimination against immigrants, the fact that many individuals within racial minorities are of lower SES, and do not carry adequate, if any, health insurance, and the lack of culturally competent healthcare and minority healthcare systems (Edberg et al., 2011). Additionally, while

immigrants from less-developed, more fat-tolerant countries may alter their big body ideals, their ideal body size often remains larger than their non-immigrant counterparts (Brewis, 2011).

Recently, researchers (e.g. Pan, et al., 2009) have begun to study obesity in some immigrant groups, such as the Hispanic/Latino populations, and to a lesser degree, Asian and Caribbean populations living in the U.S. Generally, however, ethnicity related obesity studies that include Afro-Caribbeans tend to lump people from this group with African-Americans (e.g., CDC studies that aggregate these groups) (Sealy, 2010). People from the Caribbean are culturally different from African-Americans, but the majority of obesity studies have disregarded Afro-Caribbean individuals as a unique group (Bramble et al., 2009).

1.3 The populations for this study

Two groups of women—native African-Americans and recent Afro-Caribbean immigrants were included in this study. The census and most studies define African-Americans as women “having origins in any Black racial groups of Africa” (U.S. Census, 2010). This study, however, explores Afro-Caribbeans as a potential sub-group of the African-American populations, as generally defined. Here (in this study), African-American is defined only as persons of African ancestry, who were born in the U.S., and who identified as African-American. The Afro-Caribbean immigrant group was defined as women of African ancestry who have lived in the U.S. for no more than eight years and have migrated from any of the English speaking Caribbean countries. Specifically Afro-Caribbean participants were from Jamaica, St. Kitts, and the Bahamas.

This study focused on women who, at the time of the study, lived in Metro Atlanta, Georgia, where obesity prevalence among the general population was 29.1% in 2012, and 36.8% among African-Americans (CDC, 2012b; Trust for America’s Health & Robert Wood Johnson

Foundation, 2014). Women who visually appeared to be within, and others that exceeded, recommended BMI guidelines were interviewed. This was gauged by observation, estimating whether women appeared as if they would be categorized as being overweight or obese. The rationale behind this was to gather information from both sets of women regarding body size related behaviors and perceptions. Understanding what they do (and do not) consider relevant (salient) to them, and what gets their attention may then provide insight into why obese women become obese, and why non-obese women within these populations are not.

The researcher's personal interest in the Afro-Caribbean immigrants is based on her own heritage and personal knowledge about, and experience within, the Caribbean culture. The region's distinctive history, music, foods, tastes, food preparation practices, and ways of life that have been constructed through shared environmental influences (Premdas, 1996). Such cultural factors differentiate Afro-Caribbean people from African-Americans. These two groups are also different in behaviors that are associated with body size. For example, compared to African-American women, Afro-Caribbean women tend to be more consistently involved in walking as a form of physical exercise and consume less refined foods (Bramble et al., 2009).

The Afro-Caribbean participants in this study included only immigrants who have lived in the U.S. for no more than eight years. This is because obesity-related immigrant studies (e.g., Goel, McCarthy, Phillips, & Wee, 2004; Phelan, 2009) have determined that as immigrants' length of time living in the U.S. increases, their attitudes and behaviors change and, in many instances, their health deteriorates. The deterioration that has been observed is attributed to acculturation. According to Satia-Abouta, Patterson, Neuhouser, and Elder (2002), "The term 'acculturation' is commonly used to denote the process by which a racial/ethnic group, usually a

minority, adopts the cultural patterns (e.g., beliefs, religion, language) of a dominant host group” (p. 1106).

Studies on immigrant obesity have revealed an association between acculturation and excess weight and a decline in the quality of immigrants’ diet (Goel et al., 2004; Phelan, 2009). For instance, Goel et al. (2004) found that, after adjusting for age and sex, obesity prevalence was only 8% for immigrants who had been resident in the U.S. for less than a year, but 19% for those who had been living in the country for 15 or more years. Other studies (e.g., Yang, Choi, Chee, & Kin, 2012) confirm that the effects of acculturation on obesity start becoming evident between ten and fifteen years. Accommodations to the new environment often include reduced levels of physical activity and the consumption of energy-dense and less healthy foods, which have all been established as contributors to obesity among immigrants (Bramble et al., 2009; Cairney & Ostbye, 1999; Yang et al., 2012).

The decision to limit this study to women is based on a number of factors. First, women are more likely than men to be overweight or obese. Second, there is a positive relationship between maternal obesity and childhood obesity. For example, birth- and later infancy-BMI have been found to be more strongly associated with maternal, than paternal, obesity, and severity of obesity in children at age seven has been found to be positively correlated with maternal BMI (Linabery et al., 2013; Svensson et al., 2011). Additionally, having an obese mother was shown to be associated with an earlier onset of obesity in all races/ethnicities. Moreover, early onset of obesity was found to be associated with increased severity of obesity in the young-adult and adult stages (Gordon-Larsen, Adair, & Suchindran, 2012).

Women also influence family food choices. A matrilineal influence (influence of mothers, aunts, and grandmothers) was found to be present and persistent on the food choices

made by families even when their mothers were no longer present (Johnson, Sharkey, McIntosh, & Dean, 2010). Moreover, the person who prepares most of the meals—typically, women— influences the eating habits within families; it is therefore important to study women (Di Noia et al., 2009). These reasons underscore the pivotal role of women in the development and persistence of obesity, and highlight the importance of understanding, and addressing, obesity-related issues from their perspective.

1.4 Theoretical framework

Social cognitive theory (SCT) was employed to examine the role of culture and social factors in African-American and Afro-Caribbean women's perceptions of obesity and behaviors that may contribute to obesity (e.g. food preparation, exercise, etc.). The theory explains that behavior is influenced by a combination of three factors: personal, behavioral, and environmental. It suggests that there is a reciprocal relationship among these factors, meaning, that if any one factor changes, it affects the others. This phenomenon is referred to as the reciprocal deterministic triadic relationship among personal, environmental, and behavioral factors. All of these factors, which are explained below, have potential implications for lifestyle choices and beliefs, but they may also interact with culture to affect beliefs and behaviors (Bandura, 2004; Kreuter & Haughton, 2006).

Environmental factors. Within the SCT, environments are differentiated as social and physical and are considered as being external to the individual (Baronowski, Perry, & Parcel, 2002). The social environment includes those around us (family, friends, peers), who are involved in our socialization, whereas the physical environment involves geography, space, or considerations such as the availability of certain types of foods in surrounding areas (Gorin, 2006). According to SCT, we interpret our world based on our background, and on how we were

socialized through our family, friends and life experiences that shape our attitudes and values (Baronowski et al., 2002). Individuals therefore interpret, or decode, obesity-related messages according to the cultural values and attitudes with which they were socialized. The availability of food is an example of how obesity-related messages might be non-verbally coded within the physical environment. On the other hand, messages within the social environment may be coded verbally (e.g., comments regarding obesity) or non-verbally (e.g., facial expressions of friends and family members). These verbal and non-verbal messages influence behaviors, which, in the case of obesity, can contribute to body weight, and how we respond to messages about obesity.

Personal factors. In SCT, personal factors are cognitive, affective, and biological attributes (Baronowski et al., 2002). Personal factors include, among others, cultural perceptions of obesity-related attitudes and behaviors regarding food, and exercise.

Behavioral factors. The theory posits that cognitive processes influence behavior. Environmental stimuli are processed based on cognitions of what is relevant to the individual. Cognitions, therefore, shape the individual's perceptions. In the case of this study, behaviors include actual obesity-related activities associated with food and physical activity choices and habits (Hawley, Harker, & Harker, 2010; Reynolds, Hinton, Shewchuk, & Hickey, 1999).

SCT is helpful in exploring the complexity involved in various behaviors associated with obesity; e.g., practicing physical activity on a regular basis (Calfas & Hagler, 2006). The theory is frequently used in health communication studies (e.g., Canavera, Sharma, & Murnan, 2007; Hawley et al., 2010) because it is useful for studying factors that influence the roles of values and attitudes in behavior management (Bandura, 2004). As can be seen in the examples given in the above discussion of the triadic model, the theory allows for the investigation of specific factors that influence obesity-related to attitudes and behaviors. Organizing this study around the

SCT framework provided the basis for garnering information about any interplay among multiple elements of the theory in relation to obesity. However, the dissertation focused specifically on obesity-related cultural values, attitudes and beliefs, and on the social-environmental, and behavioral factors. The physical environment was not included because the study focused on the sociological aspects contained within SCT. Additionally, because of the implications for policy, and the fact that policy was not the focus of this study, the decision was taken to exclude the physical environment.

The utility of SCT is well supported in the study of health-related issues. This theory sets out the central determinants of behavior, the process through which the determinants operate, and “the optimal way of translating this knowledge into effective health practices” (Bandura, 2004, p. 144). Rinderknecht and Smith (2004) support the utility of SCT constructs in exploring nutrition-related health behavior. The theory is also recommended by the Surgeon General as a good framework for organizing, and studying, physical activity (Anderson-Bill, Winett, Wojcik, & Williams, 2011). This theory has been used in obesity studies examining diet and nutrition (e.g., Anderson, Winett, & Wojcik, 2007; Reynolds et al., 1999; Rinderknecht & Smith, 2004), physical activity (e.g., Hawley et al., 2010; Motl, 2007; Pekmezi et al., 2012; Winters et al., 2003), attitudes and behaviors (e.g., Poobalan, Aucott, Clarke, Smith, & Cairns, 2012); perceptions (e.g., Sosa, 2012), cognitions (e.g., Sharma, Mehan, & Surabhi, 2009), and various cultures (e.g., Annesi, Smith, & Tennant, 2013; Pekmezi et al., 2012; Taymoori, Rhodes, & Berry, 2010).

SCT has also been found helpful in the design of culturally appropriate interventions (e.g., Motl, 2007). Sosa’s (2012) systematic review of culture-related obesity studies found meaningful information regarding socio-cultural, environmental, and personal determinants of

obesity; the review demonstrated some of the reciprocal influences between limiting environmental, personal, and behavioral factors. The review found that women would become involved in obesity-prevention behaviors if they perceived that the environments in which they lived were conducive to these behaviors. Knowledge (an example of a personal factor) and lack of role modeling—not seeing others performing the behavior of exercising regularly (an example of behavior in the social environment)—were found to be barriers to obesity prevention. In other words, if an individual lives in an environment in which obesity-related behaviors are not practiced, that individual is less likely to perform such behaviors because it is not the norm. Lack of role modeling within one’s social environment may therefore be a barrier because there are no examples to induce the behavior. In other words, the norm in such situations would be “not exercising.”

In summary, this dissertation drew upon SCT to explore the childhood and current social environments of African-American and Afro-Caribbean participants. Cultural values, and attitudinal and behavioral norms modeled by family and friends were determined through depth interview with participants. The study also ascertained how these factors—cultural values, and attitudinal and behavioral norms—shape participants’ food-, and physical activity-, and body image-related behaviors.

1.5 Significance of the study

As obesity levels continue to increase in the U.S., it becomes even more important to explore the factors that contribute to this trend. Understanding the role of culture in relation to obesity-related values, attitudes, cognitions and behaviors also become more germane as the population becomes more diverse. This study was designed to gain a deeper understanding of the role of culture, among other variables, in determining the obesity-related attitudes, values, and

behaviors of African-American and Afro-Caribbean women to facilitate the design of culturally sensitive messages. Studying women from both groups helped to identify cultural characteristics that may be further explored to establish population level similarities and differences between women from each of these cultures. Knowledge about such differences may play significant roles in the design of effective obesity-related messages targeted to women from each of these cultures.

The findings of the study can be used in the development of culturally sensitive messages, which is expected to contribute to the reduction of the various obesity-related health, social and economic costs that accrue to individuals, their families, communities, the state, and country (CDC, 2011a; Thorpe, 2005). By extension, the study highlights the Afro-Caribbean population as a distinct sub-group within the African-American population in the U.S. The findings from this study, therefore, can provide a basis for evaluating the plausibility of considering obesity-related cultural differences that exist within the sub-population that is now commonly referred to as African-Americans.

In summary, the overarching goal of this study was to use SCT to explore the role of culture and the social context in obesity-related health practices of African-American and Afro-Caribbean women. This ultimately facilitates subsequent differentiation in the design of more relevant obesity-related interventions/messages to these segments of the population. The dissertation is organized as follows. Chapter 2 presents a discussion on culture and health and describes the current research literature related to Afro-Caribbean women and African-American women regarding obesity (e.g., values, attitudes and behaviors; health and other consequences; message design; culture; and cultural tailoring of health messages), Afro-Caribbean immigrants, and Social cognitive theory. Chapter 2 ends by introducing the research questions. Chapter 3

provides the details of the methodology for this study—research design, data collection, participant recruitment, and data analysis. Chapter 4 presents the findings, which are discussed in Chapter 5.

2 LITERATURE REVIEW

This chapter serves to contextualize the dissertation research and to provide a basis for the development of the specific research questions. First, in order to establish the importance of culture in health-related decisions and message design, a number of topics are discussed. These include culture and health; cultural competence; the role of social influence. Next, because behaviors and attitudes are closely linked to sociocultural influences, specific behaviors—food and physical activity—and specific attitudes—obesity and body image—are discussed in relation to culture. The final section of this chapter—social cognitive theory—explains how the study is oriented and shows how the research questions were developed.

2.1 Culture and health

A culture consists of the particular values, beliefs, and behaviors that are the norm among a group of people (Lai et al., 2007; Singer, 2012). Learned from birth through socialization, and transmitted intergenerationally, culture determines how individuals within a particular group live their lives and perceive the world (Kreuter et al., 2003; Lai et al., 2007; Singer, 2012).

Accordingly, individuals' health-related attitudes and behaviors are influenced by the norms of their respective cultures, which are also influenced by the environment (Singer, 2012). One's lifestyle (which is influenced by culture) may contribute to the types of illnesses or diseases that he or she may develop. It is therefore important to study culture as a part of the inquiry into health-related behaviors (Fejerman et al., 2008; Singer, 2012).

Understanding cultural norms (e.g., patterns of communication, rules associated with power and control, individualism and collectivism, and familial patterns) provides insight into attitudes, values and behaviors (Kreuter et al., 2003). Understanding the roles of these and other cultural factors can equip public health practitioners develop more effective interventions; more specifically, incorporating designs based on informed cultural awareness can enhance communication effectiveness (Kreuter & McClure, 2004). Consequently, cultural dimensions of message design are important elements in developing effective message strategies. Culturally relevant interventions and health messages can resonate with the group of interest, thus improving the effectiveness of such programs (Kreuter & McClure, 2004).

Cultural relevance can be enhanced by targeting groups that are more homogeneous. Cultural segmentation—a segmentation mechanism for subdividing populations based on cultural similarities and differences—provides less variability within the groups. Cultural segmentation yields more defined segments for which highly targeted messages or interventions may be designed (Kreuter & McClure, 2004). Such messages, which resonate with recipients based on their cultural background, are said to demonstrate cultural competence.

2.2 Cultural competence

The idea behind cultural competence (also referred to as cultural appropriateness and cultural relevance) is designing messages that “meet the people where they are” (Resnicow et al., 1999). In other words, messages must communicate in ways that make sense to the receiver of the message. One prerequisite to “meeting people where they are,” would require not just knowledge of their specific culture, but understanding the norms, values, experiences, and conceptualizations related to their health issues (Kreuter et al., 2003).

Given the increasing diversity within the U.S. population and the variations in health indicators among population sub-groups, it is vital that cultural differences are acknowledged and incorporated in message design (Resnicow et al., 1999). Some researchers treat race/ethnicity as being equivalent to culture, but there are different cultures within racial/ethnic groups (Kreuter et al., 2003). For example, cultural differences may arise based upon where African-Americans live (e.g., South versus Midwest versus New England area; city versus rural community) or where they are originally from. Although both groups may share African heritage/ethnicity, Afro-Caribbean immigrant women and African-American women living in Metro Atlanta may have cultural differences that could impact obesity risk and prevention behaviors. Acknowledging these differences when designing health messaging will likely improve the effectiveness of such messages.

Culturally appropriate messages can be designed by utilizing peripheral, linguistic, and sociocultural approaches (Kreuter & McClure, 2004). Peripheral approaches, referred to as surface structure, include using colors and images that are salient to the audience. Linguistic approaches ensure that messages are designed in the common language of a group, and are the most basic of cultural sensitivity strategies aimed at reaching particular audiences. Sociocultural approaches use deep-structure strategies to incorporate culture and social context into messages (Resnicow et al., 1999). Deep-structure involves understanding the role of, among other things, environment, psychological makeup, and culture in how individuals perceive, and act on, health issues (Resnicow et al., 1999). This understanding then informs the development of meaningful health-related messages that are sensitive to the values, beliefs and behaviors of the group (Kreuter et al., 2003; Kreuter & McClure, 2004). These socio-cultural approaches to designing culturally appropriate messages have been insufficiently utilized in health communications

targeted toward minority groups (Kreuter & McClure, 2004). This study utilized a socio-cultural approach to understand and compare obesity-related attitudes and behaviors of African-American and Afro-Caribbean women.

There is no “one size fits all” set of factors that should be considered in the development of culturally sensitive material (Di Noia et al., 2009). In their review of literature focusing on cultural approaches to nutrition-related issues in African-Americans, Di Noia et al. (2009) contend that some factors are more relevant to particular cultures than to others. For example, there are key factors to consider when developing culturally sensitive diet-related interventions for African-Americans. These factors include spirituality (connection with a higher power), collectivism (placing emphasis on the overall goals of family and friends, rather than one’s own personal goals), the role of women as influencers on the foods consumed by the family, and preference of larger body size (Di Noia et al., 2009). Furthermore, there may be some aspects of a culture that may be “more compelling to some than others” (Kreuter et al., 2003, p. 137). The set of cultural-factors that are most relevant to individuals within each cultural group may differ (Di Noia et al., 2009).

History is an important factor that helps define different cultures and can affect food-related choices (Horowitz, Tuzzio, Rojas, Monteith, & Sisk, 2004). For example, research has shown that African-Americans believe that slavery and economic discrimination impacted their eating patterns. What is considered “Soul food” was attributed to slavery, when Whites left food that they found unfit for their own consumption for the slaves to eat, and was associated with food habits of African-Americans in southeastern U.S. states (Airhihenbuwa & Kumanyika, 1996). Foods categorized as “Soul food” are usually high fat and high-calorie (Parker & Grinter, 2014). Regardless of the nutritional problems associated with these foods—pork, macaroni,

cheese, biscuits, fried chicken, fatback, and grits—they are an important part of history, the knowledge about which African-Americans want to pass down to their children (Airhihenbuwa & Kamanvika, 1996; Parker & Grinter, 2014). Because of the meanings associated with cultural food choices, interventions that aim to persuade people to give up cultural food preparation practices may be met with resistance (Parker & Grinter, 2014).

A cultural value of individualism versus collectivism—i.e., belief that the fundamental unit of society is individual or the group, and that health and wellbeing is an individual versus group effort—is also important to designing health promotion programs (Parker & Grinter, 2014). Collectivism has been found to be an important cultural factor in designing health-related programs for African-Americans; therefore a focus is on adhering to and meeting the expectations of the family and larger community, as opposed to one's own individual desires or goals. Designing collectivist health messages focuses on group responsibility for meeting the goals of friends and family (Parker & Grinter, 2014).

Health-related programs often fall short because of a lack of understanding of the populations for whom the programs are intended (Horowitz et al., 2004). Cultural tailoring provides a means of addressing uniqueness within cultures (Kreuter et al., 2003). The process involves understanding individuals' perceptions of their culture, the degree to which they identify with the culture and the values within that culture that they consider important to them, and then designing messages that appeal to their most salient cultural values. Very few studies have tailored health messages to Afro-Caribbean Americans. One study, however, found that this group depended on the church and spiritual leaders to help them reach health-related goals. In addition, the Afro-Caribbean group was found to hold strong values and the desire to be healthy (Archibald, 2011). Being aware of characteristics such as these is important for successful

tailoring of health-related message (Archibald, 2011). The following discussion explores what is currently known about communication, social influence and health behaviors, and cultural variation in food choices, physical activity, and body image.

2.3 The role of social influence

Efforts to develop culturally appropriate strategies should consider (a) the influence from social networks, (b) identifying new encouragers to help increase efficacy, (c) the role of motivators within social networks, and (d) the role of family in supplying family health history, as this may act as a motivator for behavior change (Ashida, Wilkinson, & Koehly, 2012). These factors, among others, provide important bases for message design decisions. Being aware of the influence provided within social networks is important because health is often managed through social relationships and should therefore be considered within social contexts (Bandura, 2004). Additionally, health behavior-related social norms partially explain health behaviors (Lewis, Devellis, & Sleath, 2002) as members of social networks are subject to “social controls and peer pressures that influence normative health behaviors” (Cohen, Gottlieb, & Underwood, 2000, p. 11). This control is a result of ‘injunctive social norms’—norms that dictate the contextually acceptable and unacceptable behaviors (Cohen et al., 2000). Anticipation of rewards and penalties for acceptable and unacceptable behaviors influence behavior decisions and have psychological effects on individuals (Cohen et al., 2000). Psychosocial influences then affect self-efficacy regarding personal change and whether individuals continue behaviors; these psychosocial influences also affect one’s capacity to recover from hindrances or setbacks (Bandura, 2004). Identifying the key encouragers within the social network provides trusted individuals through which interventions may be channeled. Persons within one’s social environment may be more likely to encourage behavior change; these persons have information

(e.g., family history, likes and dislikes) relative to the individual and therefore may be better equipped to encourage behavior change (Ashida, et al. 2012). Understanding the influence from social networks and the social norms within formal relationships is therefore helpful in explaining self-efficacy—“belief in one’s abilities to organize and execute the course of action required to produce given levels of achievement” (Bandura, 1998, p. 625)—sense of acceptance, belonging, and support for and ability to overcoming obstacles which all influence health-related behaviors.

2.4 Food, physical activity, and culture

Food-related choices, including the way in which food is prepared and consumed, are representative of culture (Green & Cramer, 2011; Rozin, 2006). Food preparation and consumption habits play roles in the construction of cultural identity and in forging connections between people of similar culture (Green & Cramer, 2011). Some studies have been conducted on the social and cultural aspects of food choices of African-Americans (Antin & Hunt, 2012) and physical activity in African-American women (Gletsu & Tovin, 2010). Most studies either focus on African-Americans only or compare African-Americans to Caucasian Americans. There are not many published studies that explore Afro-Caribbeans. A search for literature comparing obesity-related behaviors and attitudes of Afro-Caribbeans and African-Americans found one study only—Bramble et al., 2009. This study is discussed in some detail throughout the dissertation.

Studies of African-American women provide varying conclusions about their values and attitudes toward physical activity. A review of research on the topic identified both factors that limit their involvement in physical activity as well as factors that increase their desire for physical activity (Gletsu & Tovin, 2010). For example, the importance of focusing on domestic

demands, their role as caregivers, a lack of support for the involvement of women in physical activity for the sake of getting exercise, and the desire to maintain their hairstyles are reasons for avoiding physical activity. Postmenopausal overweight and obese African-American women identified 'time with God' and positive influence on their families as reasons to persist in walking as a way of being physically active (Gletsu & Tovin, 2010).

The importance of studying social and cultural meanings of obesity-related behaviors in African-American women is also supported by research on food habits. Some food choices made by African-American women are based on cultural traditions, while others were based on positive associations with family and friends, even in some instances where the food choices would compromise health (Antin & Hunt, 2012). Furthermore, because of the racial and social class discrimination faced by African-American women, the social benefits of food consumption may be important for this group (Antin & Hunt, 2012).

Studies related to obesity indicate cultural differences between Afro-Caribbean persons and African-Americans in terms of preferences for, and attitudes towards, food types and food preparation methods (Bramble et al., 2009). For example, Afro-Caribbean women are of the view that their traditional food preparation methods and lifestyle of physical activity are healthier habits (compared to U.S. habits) and therefore should be continued and passed along. African-American women, on the other hand, prefer the option of changing traditions for health reasons (Bramble et al., 2009). Another difference that has been found between the two groups is that whereas Afro-Caribbean women noted that it was the norm for their diets to consist of foods that were not processed, African-American women shared no concerns about consuming processed foods. Also, Afro-Caribbean women were concerned about the food in the U.S. (Bramble et al., 2009). Factors, such as cultural heritage, that differentiate these cultures are potentially important

in providing insight that may be incorporated into strategic interventions to address behaviors that influence obesity levels.

2.5 Obesity, body image, and culture

Body size symbolizes fundamental cultural attitudes and values that determine the body image norms for any particular culture; these norms in turn shape bodies that are consistent with the body ideals for the culture (Brewis, 2011). Symbolic representation of body size differs not just among cultures, but also within the scientific community, and between the scientific and lay communities (Davidson & Knafl, 2006). Within the scientific community, varying researchers have used different cut-off points along the BMI scale to assign overweight and obesity classifications. This has contributed to difficulties in comparing studies and in drawing conclusions about the degree to which some of the concepts apply to populations in general (Davidson & Knafl, 2006). These difficulties can potentially add to confusion within the general population. Overweight and obesity are generally used within the scientific community to symbolize prevalence of disease and morbidity risk. However, within the lay community, body size conveys various symbolisms and associations, dependent on the culture of the lay group in question. Some of these symbolisms and associations are discussed below.

2.5.1 Perceived health-risk association

Davidson and Knafl's (2006) review of literature found varying findings regarding perceptions about the association between obesity and perceived health-risk. Results varied among, and within, cultures. For example, one study indicated that Latino-Americans were of the belief that there was a direct association between obesity and health risk, whereas another study found that Latino-Americans did not think there was such an association. They found one study that revealed that African-American women were more concerned about maintaining weight at

which they felt comfortable than they were about their doctors' recommendations. This was the case, even when their perceived ideal weight was above the weight recommended by their doctor. In another study, African-American women perceived overweight and obesity to be the weight at which their physical health is affected (Davidson & Knafl, 2006). As far as Caribbean women are concerned, Fraser (2003) states that obesity is partially attributable to the traditional belief that a large body is healthy.

2.5.2 *Attractiveness*

Larger bodies are more acceptable for African-American, than for Caucasian, women (Newton, Guo, Yang, & Malkin, 2012). This, and other cultural beliefs (discussed below), may lead to behaviors aimed at achieving and maintaining larger bodies in African-American women. Such beliefs may therefore play a contributory role in obesity in African-American women (Newton et al., 2012). The Davidson and Knafl (2006) review also noted interesting cultural variations in perceptions of attractiveness relative to obesity. In eleven of twelve studies on African-American populations, "obesity and attractiveness" were found to be "positively related" (p. 345). Studies on Caucasian American populations, however, revealed that the participants "equated obesity with unattractiveness" (Davidson & Knafl, 2006, p. 345). Consistent with other studies that found that African-American women tend to prefer larger bodies, in this review, all seven studies of African-Americans that explored sexual attractiveness found "obesity" to be "sexually desirable trait" (Davidson & Knafl, 2006, p. 345; Gluck & Geliebter, 2002). Furthermore, Bramble et al. (2009) found that compared to African-American women "Afro-Caribbean women's threshold for obesity was lower and was based on their own cultural reference points" (p. 64). They added that Afro-Caribbean women were humiliated by the

disapproving comments (made by their counterparts in their Caribbean countries) about weight they (the Afro-Caribbeans) had gained.

Compared to Caucasian-Canadian women, Afro-Canadian women, like African-American women, have also been found to resist the dominant culture regarding health, obesity, and beauty (Ristovski-Slijepcevic et al., 2010). This resistance has been attributed to group affiliation. The differences between African-American and Caucasian women extend to their perceptions of how men view body size. Caucasian women felt the extra weight made them less attractive to men. In contrast, African-American women stated that men preferred bodies that were covered by meat (Blixen, Singh, & Thacker, 2006).

2.5.3 Meanings of body size

Additional studies have identified differences in the meaning of body size among people from the Caribbean region, compared to African-Americans. The Bramble et al. (2009) study of Afro-Caribbean groups and African-Americans found differences not only in terms of their preferences for food and food preparation methods, but also regarding perceived meanings of body size. The dominant definition and meaning of obesity (definition and meaning accepted by population majority) was seen as irrelevant for African-Americans. For this group, the meaning of body size was reported as a function of each individual's personal view and level of comfort with herself (Bramble et al., 2009). Findings related to body size meaning for Afro-Caribbeans have been conflicting (Brewis, 2011). Jamaicans (a sub-group of the Caribbean population) associate larger size bodies with positive symbolisms such as sexuality, fertility, power, health, wealth, status, and "good reciprocal social relations" (Brewis, 2011, p. 101). Natives of Belize (in Central America) believe that the body is natural, God-given, and with no particular meaning associated with body size (Brewis, 2011).

2.5.4 Summation

The attitudinal and behavioral variations highlighted in these studies underscore the value of moving beyond ethnicity and acknowledging culture as an important differentiating factor in obesity-related studies. Procuring this type of knowledge enhances our understanding and enables us to pursue, in meaningful ways, recommendations for culturally tailored messages. For example, based on a study of Afro-Barbadian women, Nemesure, Wu, Hennis, and Leske (2007) concluded that cultural factors played a role in “the prevalence of obesity” (p. 508) and therefore recommended culturally tailored interventions to address this problem. Similarly, following the observation that dominant messages regarding body size may be disregarded by a target group, Wood-Barcalow, Tylka, and Angustus-Horvath (2010) noted the importance of designing culturally relevant messages. It is therefore crucial that cultural variations be explored and understood to facilitate the development of more relevant (salient) health messages aimed at addressing obesity. In this dissertation, Afro-Caribbean immigrant women and African-American women were studied to gain understanding about the role of culture in shaping body size-related behaviors and perceptions. Social cognitive theory was used for the theoretical framework of the study.

2.6 Social cognitive theory

Social cognitive theory (SCT) is a theory of learning and behavior. Developed by Albert Bandura, the theory started as the Social Learning Theory and was later developed into the SCT in 1986. It states that learning is determined by dynamic reciprocal relationships among behavioral, environmental, and personal factors. The general ideas associated with these factors were discussed in Chapter 1. Here, I discuss them in the context of this study. Behavioral factors, such as lifestyle (e.g., level of physical activity) and diet (e.g., food choices, food preparation

methods), are impacted by personal factors (e.g., values and attitudes associated with obesity). Both personal and behavioral factors influence are influenced by multiple aspects of the environment (e.g., access to healthy foods; values and attitudes of family members and friends); these factors have also been found to affect the risk of chronic illnesses such as obesity (Adlercreutz, Mousavi, & Hockerstedt, 1992; Alcantara, & Speckmann, 1976; Friedenreich, 2001; Nguyen, & El-Serag, 2010; Phelan, 2009; World Cancer Research Fund (WCRF)/ American Institute of Cancer Research (AICR), 2007).

Although SCT emphasizes the physical and social aspects of the environment, commercial and cultural aspects may also be included (NIH, 2012; Phelan, 2009). The physical environment includes the physical surroundings and availability of, and access to, various facilities (Baranowski et al., 2002; Phelan, 2009). These elements of the physical environment influence the types of food and drink that are consumed and the ease with which individuals in an area can safely participate in regular physical activities (such as walking). Commerce involves macro-level structures and the effects of government and business operations on behaviors of individuals (Brewis, 2011; Phelan, 2009). For example, government subsidies on grain have resulted in a reduction in the prices of food and drink products that are made using grain. Many of these products are unhealthy snacks, and they, along with sugary drinks, yield high profits for supermarkets, and thus are stocked in abundance, thereby affecting what foods are available via the physical environment (Phelan, 2009). Easy access to an abundance of cheap, unhealthy food and drink presents attractive non-verbal messages regarding what items to purchase.

Additionally, healthier foods such as fresh fruits and vegetables are more expensive, whereas dollar menus and all-you-can-eat establishments provide relatively cheap, but less healthy alternatives (Phelan, 2009). The social environment—e.g., friends, family members and others

with whom individuals interact on a regular basis—is believed to be a strong influence on behaviors and beliefs (Baranowski et al., 2002; Phelan, 2009). In this study, I concentrate primarily on the social environment and the role of culture.

Cultural beliefs, traditions, and attitudes are among the personal factors that determine behaviors (Brewis, 2011). These beliefs, traditions, and attitudes are formed and adapted as individuals are socialized according to the related norms of those within their social environment (Singer, 2012). Understanding the social environments that influence behaviors and attitudes, therefore, serves to further equip health professional in designing interventions to which can relate. Some cultural beliefs that may affect obesity include the value placed on big babies as healthy, and celebrations that involve the consumption of high fat and sugary foods. In addition, in some cultures, exercise is discouraged and women who do exercise are seen as selfish—they are placing higher priority on themselves than on their families if they take time to engage in exercise (Phelan, 2009). Understanding how the cultural aspects of personal (e.g., values and beliefs), environmental (social influence), and behavioral (cultural practices) factors influence attitudes and behaviors of any group is therefore vital to efforts aimed at addressing overweight and obesity; guided by SCT, this study focuses on these cultural aspects relative to African-American and Afro-Caribbean immigrant women.

An important concept within SCT is observational learning. This concept refers to the learning and performing of behaviors through observation and vicarious reinforcement. By observing others perform a behavior (role modeling) and by seeing the outcomes associated with that behavior, one learns how to perform the behavior, and what consequences to expect as a result of performance. Learning by observing others model a behavior, referred to as vicarious learning, takes place as we observe the behaviors of those within our social environment.

Bandura posits that, in order for modeling to be effective, there must be attention, retention, reproduction, and motivation. The level of attention paid to the modeled behavior is dependent on a number of factors, including the individual's perception and the degree to which the behavior can affect the individual. Retention, recalling that to which one attended, is related to one's own symbolisms, and physical memory (e.g., motor memory). Reproduction is the ability to carry out the behavior as observed, whereas motivation is about having reason to perform or refrain from performing a behavior. Motivation is linked to the consequences that may have been observed in a situation where the modeled behavior was performed or where the behavioral model excludes certain practices

Applied to the context of this study, if a woman becomes interested as she sees her friend model the behavior of exercising regularly, she pays attention and retains the information. She may also take note of the compliments that her friend receives when she is able to run up a flight of stairs (consequences) while she, herself, is breathlessly struggling to make it up just a couple of steps (consequence of her own non-action). If she is able to start exercising also (reproduction of observed behavior), she may, in anticipation of getting some compliments of her own (motivation), start accompanying her friend on her evening walks (effective modeling). If, however, this woman is from a family where exercise among women is frowned upon, she may not be easily influenced to join her friend's exercise program.

SCT, based on the assumptions of purposeful (i.e. goal-oriented) behavior, self-regulation, and observational learning, is organized around a triadic reciprocal deterministic model (Motl, 2007). Purposeful behavior is behavior that is determined by, and directed toward, goals set by the individual. The individual is not merely acted upon by the environment, but also determines for himself, or herself, whether to perform the behavior. Bandura (2001) referred to

this as agency. In the example in the previous paragraph, going for evening walks with a friend may be considered purposeful behavior, with the goal of becoming physically healthy. Agency functions within social structures, which provide incentives and disincentives, producing health habits are usually deeply rooted (Bandura, 1998). Self-regulation refers to the process of volitional determination and performance of behaviors to achieve goals – the woman determines if, and when, she will start accompanying her friend on her evening walks, and how often she will do this. Observational learning refers to behaviors that are acquired by observing others perform the behavior (e.g., observing a friend walk daily) and by observing the associated outcomes of those behaviors (becoming fit, receiving compliments). Observational learning is not always accompanied or followed by acting out (performing) the behavior that has been learned. Bandura states that learning is a different process from demonstration of learning. To act out what one has learned requires additional factors, such as the motivation to act, which in this example may be a strong desire to get fit or the value placed on receiving compliments.

The interacting triadic reciprocal factors in our example are the social (friends) and physical (safe walking trails) environmental influences on behavior (regular walks), and personal factors of the woman observing her friend, and desiring healthier outcomes like being able to walk upstairs without running out of breath (motivation). In general, social factors include behaviors and attitudes of friends and family members, whereas a safe physical space for walking would be an example of the physical influence. The personal factor of SCT includes cognitive (e.g., knowledge, values, beliefs), affective (e.g., feelings/emotions) or biological elements. A woman's own perceptions regarding body size or healthy lifestyle are examples of cognitive elements.

Approval or disapproval from significant social sources—family and friends—can impede or advance behavior production (Bandura, 2004). Behaviors that communicate approval or disapproval are perceived as behavior facilitators and impediments, respectively (Bandura, 2004). For example, as indicated previously, in certain cultures, women who undertake regular exercise are looked upon as being selfish because they are seen as abdicating maternal responsibilities in favor of attending to self (Phelan, 2009). In addition, degree of access to affordable healthy food can result in an impediment to, or a facilitator, of healthy behaviors. So, if one does have access to affordable healthy food, this is considered a facilitator of healthy eating, whereas, not having access would constitute an impediment. By the same reasoning, if one has access to a safe physical environment (say, a walking path) that access would be a facilitator of the healthy behavior of walking regularly; not having access to a safe walking environment would be an impediment to the healthy practice of walking regularly. These impediments and facilitators may therefore affect the personal health goals of the individual.

Goals are linked mainly to the individual's personal characteristics, such as values, which can be strong motivators (Bandura, 2004). Goals may be proximal or distal. Proximal goals are more short-term and yield more immediate results, whereas distal goals, such as weight loss, weight maintenance, and exercising regularly, take a longer time to achieve and therefore are more difficult to maintain. One's values must therefore line up with goals in order for an individual to be sufficiently motivated to persevere toward set goals. For example, if one sets a goal of losing 50 pounds of body weight, unless one has strong cultural values, and other personal motivations regarding achieving and maintaining lower body weight, one is not likely to continue the behaviors required for weight loss long enough to realize the goal. This will usually

be the case, even when other factors, such as availability of safe exercising facilities, are favorable.

This dissertation is exploratory and utilizes qualitative data, therefore making it impossible to examine causality and influence. The social cognitive model is used as a framework around which the research questions for this study were drawn. The study does not include all elements of SCT discussed here but focuses on those that are most relevant to the design of culturally sensitive messages aimed at persuading individuals to change behaviors. Accordingly, the study highlights participants' social environments and examines how the norms of their respective cultures influence their own obesity-related attitudes, and behaviors. Other factors, such as the physical environment, which would require policy-type strategies, are not included.

2.7 Research questions

Research has supported the use of SCT for obesity-prevention interventions. In Bandura's (1998) explication of SCT, it is posited that behaviors are affected by social norms, which act as behavioral standards and carry social consequences (Bandura, 1998). The social environment—behaviors, norms, beliefs, and behavioral expectations of family, peers, and friends—can facilitate or inhibit health behaviors (Anderson et al., 2007; Bandura (2004); Baranowski et al., 2002; Cullen et al., 2001; Phelan, 2009). To ascertain the similarities and differences in the obesity-related norms of the childhood and current social environments of African-American women and recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, the following research questions were explored.

RQ 1a: What are the food-related norms of the childhood environments of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

RQ 1b: What are the food-related norms of the current social environments of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

RQ 2a: What are the physical activity-related norms of the childhood social environments of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

RQ 2b: What are the physical activity-related norms of the current social environments of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

RQ 3a: What are the body image-related norms of the childhood social environments of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

RQ 3b: What are the body image-related norms of the current social environments of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

Behaviors that are modeled in one's social environment, for example, physical activity (Anderson-Bill et al., 2011) play a role in the learning of those behaviors. Observing the outcomes of those modeled behaviors serves to reinforce what is learned and influences the observer's decisions about whether to perform the observed behavior. Likewise, observing eating and other health- and obesity-related behaviors among one's close friends and family can play a role in the decision to carry out similar behaviors. The following research questions therefore compared the role of social environments in the obesity-related attitudes and behaviors of African-American women and recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia.

RQ 4a: What are the roles of the childhood social environments in the current food-related behaviors of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

RQ 4b: What are the roles of the current social environments in the current food-related behaviors of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

RQ 5a: What are the roles of the childhood social environments in the current physical activity-related behaviors of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

RQ 5b: What are the roles of the current social environments in the current physical activity-related behaviors of (i) African-American women and (ii) recent Afro-

Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

RQ 6a: What are the roles of the childhood social environments in the current body image attitudes of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

RQ 6b: What are the roles of the current social environments in the current body image attitudes of (i) African-American women and (ii) recent Afro-Caribbean immigrant women living in Metro Atlanta, Georgia, and (iii) how are the two groups similar and different?

3 METHODOLOGY

This chapter outlines all the methods and procedures that were used to gather and analyze data for the study. Included are discussions of the research design, including data collection and procedures, discussion guide, coding, data analysis, reporting, and procedures for maintaining dependability of results and interview confidentiality. Additional documentation—Preliminary Questions, and Discussion Guide—can be found in the appendices of this document.

3.1 Research design

3.1.1 Overview

The purpose of this study was to understand the obesity-related health attitudes and behaviors of African-American women and Afro-Caribbean immigrant women residing in Metro Atlanta. A phenomenological approach based upon Social cognitive theory guided the study. It was designed to promote a deep structured understanding about the cultural and social

environmental factors that shape obesity-related beliefs and behaviors of African-American women and Afro-Caribbean immigrant women. Data were collected through in-depth interviews.

3.1.2 In-depth interviews using an interpretive phenomenology

Phenomenological inquiry involves the identification of the basic core of an individual's experience of a phenomenon (Cresswell, 2009). A main assumption associated with phenomenology is the creation of knowledge through the interaction of the researcher and research participants (Reiner, 2012). The questions employed in the phenomenological methodology should produce detailed information about participants' perceptions and experiences (Roulston, 2010). For this reason, open and semi-structured questions were used to facilitate free sharing in each participant's own voice (Roulston, 2010). Two phenomenological approaches could have been adopted. The first— Husserl's descriptive phenomenology—depicts what is learned from the data and thus adds meaning by portraying phenomena (Offredy & Vickers, 2010). The researcher is required to bracket, or set aside his or her own perceptions and inclinations toward the phenomenon being studied to avoid influencing findings (Reiner, 2012). The second approach—Heidegger's interpretive phenomenology (also called hermeneutic phenomenology) involves analysis, synthesis, and interpretation of the text to articulate the meaning of the phenomenon as lived by the participants (Benner, 1994; Cresswell, 2009). This approach does not include bracketing; according to Heidegger researchers cannot possibly be totally objective. This study utilized the interpretive phenomenological approach.

The phenomenological approach assumes some shared knowledge and experiences between the researcher and participants, thus leading to more realistic interpretations of the meanings of phenomena, as they are experienced by participants (Reiner, 2012). The researcher for this study has lived in both the Caribbean and the U.S. She has some experiential knowledge

of the phenomena of interest from the Caribbean contextual perspective. The researcher immigrated to the U.S. 14 years ago from Jamaica and still frequently visits friends and family in the Caribbean. Her “expertise” about the Caribbean culture, and experience as an immigrant to the U.S. served the project in two ways. First, participants from the Caribbean seemed comfortable and “at home” during informational discussion and interaction; they seemed to feel as if they were speaking to someone who could relate to their experiences. Second, it was unlikely that the information that was shared by these participants would be misinterpreted because the researcher understands the Caribbean culture and many of the lived experiences of immigrants from that region. The researcher, however, did recognize her limitation in terms of having the same level of rapport with the African-American participants. This was taken into consideration and she sought clarification on anything that was not readily understandable to her. Living in Metro Atlanta for 14 years prior to collecting this data, however, helped the researcher understand some of the cultural aspects of the African-American women’s experiences. Both groups were asked similar questions, with discussions being adapted to each (African-American and Afro-Caribbean) context.

3.2 Identification and recruitment of participants

Thirteen African-American women and 12 Afro-Caribbean immigrant women (totaling 25 participants) living in Metro Atlanta at the time of the study were recruited between October 5 and December 26, 2014. African-American participants were women “having origins in any Black racial groups of Africa” (U.S. Census, 2010), but they were all native African-Americans (born and raised in the United States) and said that they identified as African-Americans. The Afro-Caribbean immigrant women were Caribbean-born immigrant women who had been living in the United States for no more than eight years. They are of African-descent, identified as

Afro-Caribbean women, and immigrated to the United States from English-speaking countries (Jamaica, St. Kitts, and the Bahamas) (Thomas, 2012).

Purposive (based on age and ethnicity—African-American and Afro-Caribbean) and snowball sampling were used to recruit participants. First, flyers were posted on public notice boards, and in commercial areas in communities where there are high percentage of African-Americans and Afro-Caribbean residents. Examples of these communities are Stone Mountain, Snellville, and Decatur. Before placing flyers, permission was obtained from owners of selected shopping areas, community organization message boards, and restaurants to post a flyer (Appendix A). Additional flyers were also left at each location so that interested persons would take a copy for easy access to contact information. The second method of recruitment was through people known by the researcher. These acquaintances were asked to inform possible recruits about the study, and to ask them to contact the researcher if they were interested in participating in a study about women's health-related lifestyle habits. The third method of recruitment was through snowball sampling via participants who were interviewed. They were asked to inform other people they know and to have interested parties contact the researcher.

Eligibility of persons who contacted the researcher was assessed by asking preliminary questions, which established that each individual met the required criteria for participation in this study. These criteria included (a) heritage (African-American woman or immigrant women from an English-Speaking Caribbean country), (b) for immigrant women, length of residence in the US must have been no more than 8 years, and (c) age (participants had to be between 18 and 65). This information for each participant was recorded on a preliminary screening form (Appendix B). Eligible persons were asked to participate in the study at a convenient time within the week following their initial call. The date, time, and location for each interview were also discussed

and agreed upon during this initial contact. Care was taken to ensure that the location was (a) one in which the participant felt comfortable, (b) a public place (such as a coffee shop) where we could physically distance ourselves from other patrons for the purpose of conducting a private discussion, and (c) relatively free from distractions. Almost all interviews took place in coffee shops. In a few instances, participants asked for the interview to be conducted at their homes because they found that to be more convenient than having to find child care for their children while they were out.

Participants were comprised of Afro-Caribbean immigrants from English-speaking Caribbean countries and African-American women. It was easier to gain access to African-American women than to Afro-Caribbeans because of the stipulation that they (Afro-Caribbean women) should have resided in the U.S. for no more than eight years. This was an important stipulation because, as discussed in chapter one, literature shows that acculturation starts to be noticeable after ten years of residence in the new host country (Yang et al., 2012). The rationale for including only those who have been living in the U.S. for up to eight years, therefore, was that they were expected to be among those Caribbean immigrants who were less acculturated than those living here for a longer period of time.

The study started with a targeted minimum number of interviews but interviewing continued until data saturation was reached. This is the point at which data starts becoming repetitive and redundant, indicating adequate sample size (Salazar, Crosby, & DiClemente, 2006). In order to ensure that there would be both younger and older adults in the sample, recruitment of people aimed for equal numbers of women who were 18-32 years and those that were 33-65 years old. A total of 25 women were recruited and interviewed; six African-Americans were between the ages of 18 and 32, and seven between the ages of 33 and 65; six

Afro-Caribbeans were between the ages of 18 and 32 and another six were between the ages of 33 and 65.

3.3 Data collection and procedures

Upon reporting for the interview, the researcher reiterated the purpose of the study—to understand health-related attitudes and behaviors of African-American and Afro-Caribbean immigrant women—and confirmed that the participant was ready to be interviewed. One of the important tasks of the researcher is to impart to participants the sense that what they have to say is valuable to the study (Ulin, Robinson, & Tolley, 2005). They were thanked for agreeing to be a partner in this important study. The researcher told participants that it would be difficult to write all the information quickly enough and that she did not want to risk missing any of the important information they had to share. She then sought their assent to having the interview audio-recorded. Participants were reminded that the interviews were confidential and that there would be nothing to link any person's identity to the interview or recording. All eligible potential participants agreed to be interviewed. The contents and purpose of the consent form were discussed and participants were asked if they had any questions (Kvale, 1996). All questions and queries were addressed to the explicit satisfaction of each participant before she was asked to sign the informed consent form (Appendix C), prior to participating in the study. The researcher also signed and gave each participant a copy of the informed consent form. Before the official interview began, the researcher attempted to put the participant at ease by engaging in “small talk,” which was not necessarily related to the topic of study (Ulin et al., 2005).

The goal behind interviewing participants was to understand each person's experiences and perceptions as expressed in her own words (Ulin et al., 2005). In these situations, it is important that participants feel free to influence the flow of the conversation rather than just to

give responses to pre-structured questions (Ulin et al., 2005). Information was therefore collected through in-depth interviewing, referred to as a “conversational partnership” (Rubin & Rubin, 1995, p. 10). This interview method allows for greater collaboration between researcher and each participant, without the influence of other participants (as in the case of focus groups). The interviews, which were guided by semi-structured discussion guides (discussed in detail, below), were audio-recorded. Interviews varied greatly in length. The shortest interview was 44 minutes long and the longest was two hours and 26 minutes long.

During interviews, the researcher made note of non-verbal cues, which seemed significant and, where appropriate, explored possible meanings with the participants. Any internal inconsistencies in the information that participants shared or in the explanations they offered during interviews were explored. Clarification was sought as needed as needed and before the end of the interviews. Doing so gave participants the opportunity to rethink their responses, decide whether they wanted to change or add to anything they said previously, or just to help clarify why things may have seemed inconsistent to the researcher. This approach provided clarity and helped to enhance the credibility of the data (Kvale, 1996; Ulin et al., 2005). As some participants interacted with the researcher, they seemed to discover explanations and meanings in some of their experiences and behaviors in ways that they had not considered before. For example, one participant realized that she was making all kinds of excuses for her recent unhealthy lifestyle habits and finally concluded that although all along she had been saying she really wanted to lose weight, she was not sufficiently committed to doing so. This occurred, without any input from the researcher. This self-discovery is described as one of the steps of analysis even though it happens without any input from the researcher (Kvale, 1996).

At the end of the interview, the main points were summarized with each participant to ensure that there had been no misinterpretation of what she said during the interview. After completing the interviews, the researcher made additional memo notes as needed. Notes and audio (including utterances and pauses) were transcribed within a few days of each interview and combined with existing data and notes.

3.4 Discussion guide

Although the use of a semi-structured discussion guide provides flexibility in terms of sequencing and wording of questions (Maxwell, 2009), the interview itself commenced with questions about the participant that she was able to answer without much thought. These questions were designed to relax participants and set them at ease. The researcher also shared information about her background—Caribbean ancestry and experiences, time in the U.S. as an immigrant, and U.S. family. This was done for a number of reasons. First, the researcher wanted to disclose information about herself so participants would not be wondering about her. This was helpful because some participants said they were trying to “locate” the researcher because when they spoke with her on the phone initially, they could not decide whether her accent was British, Australian, or Caribbean. After meeting the researcher, they still could not decide on her identity because, as some persons shared, the researcher looks ethnically “mixed.” Disclosing her background seemed to promote transparency and rapport. Second, participants needed to understand that discussions would be based on some degree of similarity and differences in backgrounds. During the discussions, the researcher was careful to show complete respect for any cultural differences that surfaced and for all the information that was shared (Stark, 1996).

The more sensitive questions (e.g., body size and related questions) were asked closer to the end of the interview, or at points in the discussion where such questions fit naturally, but only

when the participant seemed relaxed and comfortable enough (Ulin et al., 2005). In some instances, some of these issues were raised by the participant herself. Follow-up and probing questions, aimed at maximizing the richness of responses, were incorporated, depending on information that emerged during each interview (Turner, 2010). Care was taken to not seem disinterested or intrusive, but to “maintain a comfortable balance” in using these techniques (Ulin et al., 2005, p. 84); follow-up questions were incorporated whenever a response required clarification, or elaboration, or where it seemed pertinent to the study. Both verbal and non-verbal probes were employed to ascertain additional details.

Responses to all body size-related questions were facilitated asking participant to choose a body type from the body image protocol Appendix D. This diagram, adopted from Stunkard, Sorenson, and Schulsinger’s (1983) self-report pictogram, was used to standardize body sizes for related questions and to help researcher determine relative choices among participants. This was especially important because size and perceptions may vary between individuals of different cultural and ethnic backgrounds. Participants were shown the pictogram—a diagram of nine women, numbered one to nine in order of increasing body size—and asked to choose the picture number that they thought best corresponded with the ideal body size as specified in the question.

The researcher was also vigilant about observing whenever it appeared that a question was not fully understood, or where it (the question) seemed to make a participant uncomfortable. In such cases, questions were reframed or delayed until later in the interview, when the participant seems more relaxed, trusting of the process, or had more time to think about a response. Also, the researcher facilitated a smooth flow and conversational discussion by providing mostly non-verbal (but some verbal) feedback that indicated to the respondent that she

was being heard and understood (Cullen et al., 2001). These responses help to keep participants at ease and feeling free to share their experiences (Ulin et al., 2005).

3.4.1 Research questions and related questions in discussion guide

There were two steps to designing the final discussion guide. First, a guide was created around elements of interest within the SCT (Appendix E-1). Next, this guide was reorganized for logic and to optimize conversational flow, resulting in two parallel discussion guides (one for African-Americans and one for Afro-Caribbeans). The only difference between the final two discussion guides was that some questions were either reframed or excluded to make the discussion more applicable to the respective group for which the guide was designed. The slight differences in the way questions were framed for Afro-Caribbeans (Appendix E-2) and African-Americans (Appendix E-3) are noted. All questions in the discussion guide were designed in order to prompt the women to discuss topics related to the research questions.

The overarching question for this study was: What is the role of culture and social factors in obesity-related practices of African-American women and recently immigrated Afro-Caribbean women? The main goal was to ascertain whether there are meaningful differences that suggest health messages should be tailored differently for the two groups. The first set of research questions was related to the attitudinal and behavioral social norms within participants' childhood and current social environments. Discussion questions included, among others, "Tell me about the types of food and drink they [*closest family and friends*] normally have. What is their favorite meal? How is it prepared? Is this similar to how it was prepared in [insert place]?" Other questions related to the norms of the social environments were "What kinds of meanings did people in [insert place] associate with body size or shape?" (When necessary, participants were probed: "Are certain sizes considered "healthier" or "sexier"? If so, then what sizes?") and

“What would the people, in general, in [insert place] where you grew up consider a good body size or weight for a woman your height?” [When necessary, the researcher probed: Do they prefer larger body sizes? How large?]. A third example of the types of question asked in relation to environmental social norms is, “what about your own family and close friends as you were growing up?” (After discussing this question, participants were asked to indicate a body type choice from the Stunkard body-type chart).

The second set of research questions asked about participants’ current obesity-related behaviors in relation to those modeled in their social environments; they were asked questions such as, “What about in recent years, how physically active have you been? Tell me about some of the things you do to be active (in Atlanta)?” Another discussion question related to participants’ behaviors was “To what extent have you incorporated those kinds of foods [*from family of origin*] into your life in Atlanta? Can you tell me about it?”

The discussion for this guide also included questions related to self-efficacy and outcome expectations. Participants discussed these topics but these discussions were excluded from the analysis for this study.

3.5 Transcription, coding, data analysis, and reporting

Although the interviews were audio-recorded, the researcher also kept notes regarding non-verbal cues (including body language and paralanguage) and follow-up questions that needed to be asked during the interview (Cullen et al., 2001). As a back-up, an additional audio-recorder was operated simultaneous with the primary recorder, in case any unexpected malfunctioning of recording devices occurred. Audio recording allowed the researcher to focus on actively listening and thus enhancing the interaction with each participant. Interacting with participants without distractions also helped to deemphasize the fact that the session was being

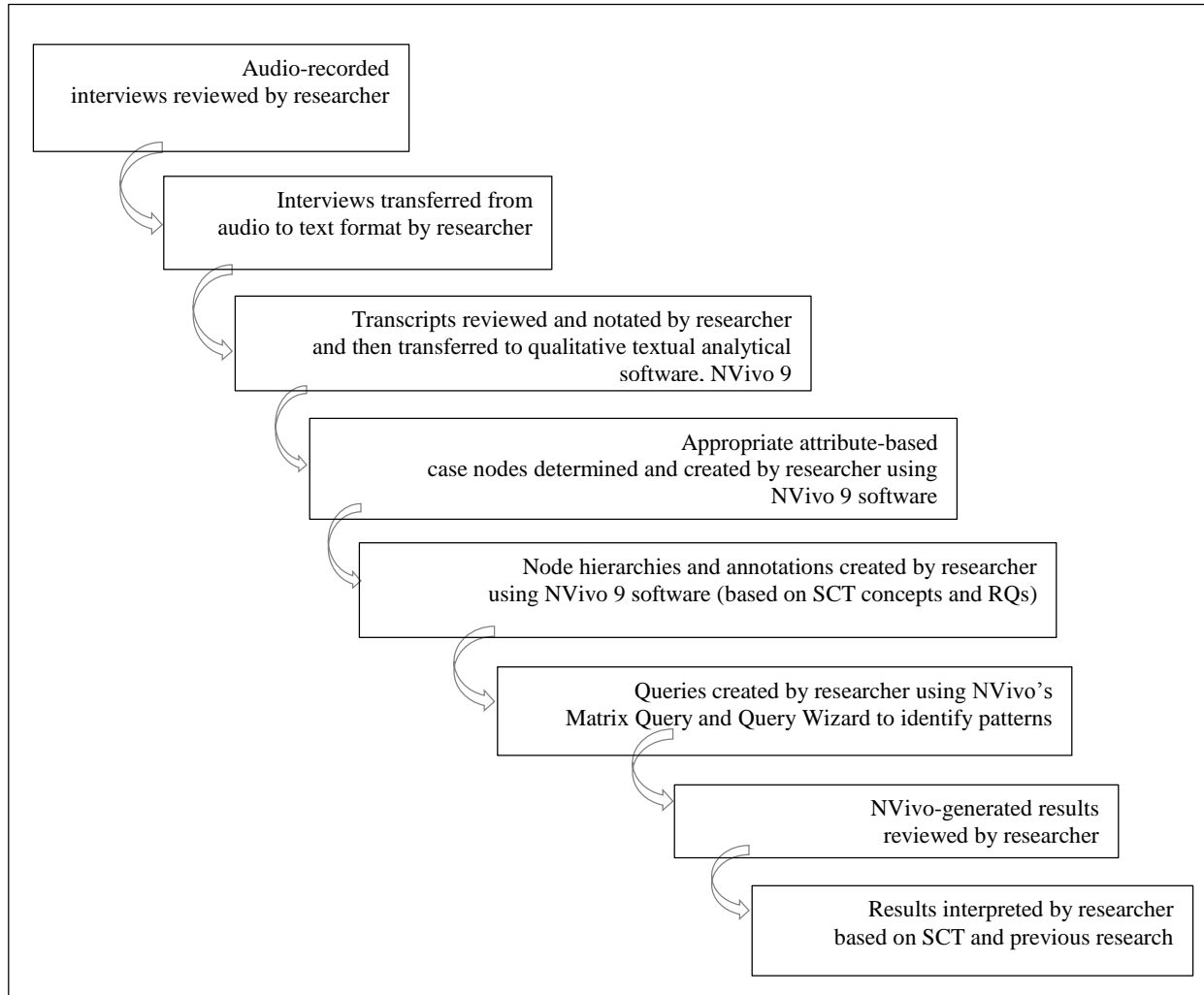
recorded and helped to reduce any related anxieties for participants. Context notes were made to record any factors (such as noise, distractions, level of comfort of room temperature) that could affect the discussion; these factors were taken into consideration to ensure that contextual considerations were not lost during data analysis (Kvale, 1996). The researcher conducted data analysis as per Ulin et al. (2005) and Kvale (1996). The complete process for analyzing the data is shown in Figure 3-1.

- Audio-interviews were reviewed and then transcribed verbatim.
- Microsoft Word transcribed interviews were read initially for content—to make sure that the type of information intended was collected—to identify gaps and questions that needed to be addressed in subsequent data collection (i.e. during remaining interviews), and to identify early emerging broad patterns and themes relative to SCT concepts that were explored. Some of these patterns included, healthy food behaviors, unhealthy food behaviors.
- Word document transcriptions were subsequently transferred to qualitative textual analytical software package NVivo9. This software facilitated the organization, classification, and coding of data and the addition of notes during the review of texts. Textual components of transcribed interviews were coded with single or multiple codes as applicable. NVivo made it relatively easy to arrive at the findings relative to the research questions of this study.
- Transcripts from different participant groups were assigned attribute-based case nodes. Attribute-based case nodes were created to facilitate ready comparison across study participants. Case node classifications were used to store descriptive information about the participants. This was done using classification attributes,

which included ethnicity, age, education, marital status, years living in the U.S. (Afro-Caribbean participants only) height, and weight.

- Other nodes were created based on SCT and research questions. Analysis of the data was informed, primarily, by SCT. Data (the imported transcripts) were coded by parent and child nodes and themes. Initial (parent) codes were created, consistent with research questions and SCT concepts. For example, a node was created for the SCT concept of childhood environmental social norms. Child nodes related to this particular parent node included food, physical activity, and body image. Participants' evaluations of the food-related norms—positive and negative—are examples of identified themes (the way the concept was expressed).
- Transcripts were reviewed to identify themes that seemed unique to each group. Positive and negative attitudes toward foods are examples of these themes.
 - Patterns in each theme were further examined for similarities and differences between cultures, groups, and individuals—to identify and keep track of exceptions.
- All codes, definitions, and examples were recorded and saved for reference as needed.
- Coding queries were run using NVivo's Matrix Coding Query and Query Wizard. This allowed the sorting of coded data for identification of patterns among particular participants (e.g. African-American versus Afro-Caribbean).
- Findings reports generated via the queries were then incorporated in the results section of this dissertation document.

Figure 1-1 Data Analysis Steps



Although the analysis of the data was based on the inter-relationships among SCT concepts around which the study was organized, the researcher was on the lookout for other themes, which challenged or did not necessarily fit this theoretical orientation. Codes were also developed to keep track of data that seemed to provide explanations for group behaviors and attitudes (Ulin et al., 1996). Exceptions were also noted as possible meaningful information (Ulin et al., 1996). During the analytical stage, the researcher was cognizant of her own background and perspectives that existed. Her background was also considered during the other stages of the

study—study design, discussion guide development, and data collection. Keeping her background in mind was especially important because of the fact that she was conducting a study in which she was more familiar with the culture one group, compared to the other. Dependence and interdependence of all the factors that may influence the phenomena being studied were considered during analysis (Ulin et al., 2005).

3.6 Procedures for establishing trustworthiness

3.6.1 Establishing process dependability and confirmability

There are various methods for enhancing process dependability, i.e., the replicability of study process (Ulin et al., 2005), and confirmability, which is the researcher's degree of neutrality. In qualitative studies, confirmability involves the researcher being conscious of her subjectivity and taking steps to ensure that the results are based on participants rather than on the biases and interests of the researcher (Lincoln & Guba, 1985; Ulin et al., 2005). Dependability, the extent to which the research process follows the rules of qualitative research, may be increased by addressing issues related to the research process, and documenting the process as scrupulously as possible (Ulin et al., 2005). The research process is therefore outlined in detail in this chapter. By being mindful of the distinction between her own values and those of the participant, the researcher was careful not to jeopardize the confirmability of the study. Although bracketing)—the process of putting aside one's own preconceived beliefs about the phenomenon under study—does not take place in interpretive phenomenological studies, the researcher enhanced confirmability by maintaining awareness of her subjectivity, personal assumptions, and views to help promote true understanding and minimize related effects on the activities carried out during this study. For example, during the development of the interview guide, the researcher took care to ensure that leading questions were not included. During the in-depth discussions

with participants, the researcher was also mindful about asking questions in ways that were not leading. Additionally, she disclosed her cultural background to participants so that they would feel unencumbered in expressing their experiences and values. In this chapter the systematic analysis of the data on which the researcher's arguments are based is also discussed. It should also be noted that an audit trail—notes of how the study was conducted (including field notes, and what the researcher hears, thinks, etc.)—was maintained throughout the research process. For example, all efforts were made to ensure consistent coding. This was done by, among other things, including meanings in code memos. Also, raw data were retained in original (i.e., recording) and transcribed formats and data reduction (list of codes), analyses, and syntheses were recorded and saved. Information regarding the details of the research context, nature of interaction, and physical environment were also maintained (Creswell, 2009; Roulston, 2010; Ulin et al., 2005).

All interview materials are included in the appendices of this document. Additionally, as mentioned earlier, during the interview process the researcher was cognizant of differences that could affect the potential dynamics between herself and members of the African-American group, compared to members of the Afro-Caribbean group. There were no noticeable difficulties in the interactions between the researcher and either the Afro-Caribbean or African-American women. In instances where the African-American women used terms that were unfamiliar to the researcher, clarification was sought. Any perceived differences in researcher-group dynamics are acknowledged and discussed in the findings.

3.6.2 *Transferability*

Transferability in qualitative research refers to the applicability of lessons learnt in the context of one study to other similar contexts (Ulin, et al., 2005). This is achieved through “thick

description” and providing sufficient detail that one may evaluate the degree to which conclusions are transferable to other situations (Lincoln & Guba, 1985). The research context, the characteristics of the study participants, the nature of the interaction with the researcher, and the physical environment within which discussions took place are outlined in detail in this report. Additionally, the design of this study is based on an established theory—SCT. Previous evidence, therefore, supports the expectation that this study would increase understanding of the particular African-American and Afro-Caribbean groups being studied. The methodological and procedural details that are discussed, will, in part, facilitate studying other similar groups, and larger samples.

3.7 Confidentiality

Data have been, and will continue to be, kept private to the extent allowed by law. Principal Investigator (PI), Dr. Holley Wilkin, and Student PI, Melany Chambers will continue to have access to research data. Information is also available to officials at the Institutional Review Board at Georgia State University (GSU) and the Office for Human Research Protection (OHRP). Code names were assigned to all participants; African-American women were assigned codes names beginning with the letter “A” and Afro-Caribbean women were assigned names beginning with the letter “C.” These code names have been used for all audio-recorded interviews, notes taken during interviews, and code sheets used to identify participants. Transcribed data are stored on a computer, protected by firewall and password. The key to the cabinet that stores assigned code names are kept separately from the data to enhance protection of participants’ privacy. Names and other facts that might identify participants do not appear anywhere in the results of this study. Audio-recordings will be destroyed within two-years of data collection. The findings are summarized and reported in-group form and as individual

quotes. Participants, however, are not identified personally; where quotations are used, the individual's code name is used.

4 RESULTS

This study explored the role of culture and social environment in obesity-related attitudes and behaviors of African-American and recently immigrated Afro-Caribbean women. All women were living in Metro Atlanta, Georgia at the time of the study. The two overarching goals of the study were to (a) explore obesity-related attitudes and behaviors of participants' social environments and (b) examine how the social environments play a role in participants' obesity-related attitudes and behaviors. More specifically, for each of these goals, African-American and Afro-Caribbean women were compared and contrasted in terms of the food-, physical activity-, and body image-related norms of their childhood and current social environments. The findings related to these questions are addressed in this chapter. First, however, the sample and individual participant characteristics are described. Additional relevant contextualizing characteristics—dominant identity and cognitions regarding obesity—are then discussed. The subsequent two sections of this chapter—"Obesity-related norms of social environments" and "Role of the social environment in obesity-related behaviors and attitudes"—are dedicated to outlining the relevant findings for each research question.

4.1 Sample description

This section of the report describes the sample of participants in terms of demographics, body mass index (BMI), and other characteristics that provide additional context for the findings of the study. These additional characteristics include the participants' dominant identity,

communication with members of their social environments, and beliefs about obesity in the United States.

Table 4-1 Sample Descriptives

	African-Americans (n=13)	Afro-Caribbeans (n=12)
	n (%)	n (%)
Median age (years)	33 ¹	32.5
Mean age (years)	36.8 ¹	34.4
BMI		
18.5-24.9 (Normal)	3 (23.1)	6 (50)
25.0 & above (Overweight or obese)	10 (76.9)	6 (50)
TIME IN THE U.S.		
Up to 4 years	N/A	4 (33.3)
5-8 years	N/A	8 (66.7)
EDUCATION		
High School Diploma	-	2 (16.7)
Some College/College degree	9 (69.2)	9 (75.0)
Postgrad/Professional	4 (30.8)	1 (8.3)
MARITAL STATUS		
Single	7 (53.8)	3 (25.0)
Committed	1 (7.7)	2 (16.7)
Married	5 (38.5)	7 (58.3)

4.1.1 Demographics

There were a total of 13 African-American women and 12 Afro-Caribbean women, all between ages 20 and 55, and living in Metro Atlanta, Georgia, during the time that the data were collected. African-American participants ranged from age 22 to between 50 and 65¹, with a

¹ One participant did not give her exact age but instead, stated that she was between 50 and 65 (57.5 used to calculate average age).

median age of 33.0 years (Tables 4.1 and 4.2). Afro-Caribbean participants ranged from age 20 to 55, with a median age of 32.5 years (Tables 4.1 and 4.3). All African-American women were born in the U.S. and identified as African-American. The Afro-Caribbean women all identified as Afro-Caribbean, were all from English-speaking Caribbean countries, and reported that they had lived in the U.S. for no more than eight years. Four of these women had lived in the United States for up to four years and the remaining eight, for between five and eight years. The annual household income reported by participants ($n=20$) was \$30,000 or more for all except one participant. The remaining five women declined to respond to this question. Twice as many African-American women ($n=8$) than Afro-Caribbean women ($n=4$) indicated that their household incomes were more than \$50,000 per year. Most of the participants in this study ($n=23$; 92%) indicated that they had achieved at least some college education. Seven African-American and three Afro-Caribbean participants indicated that they were single. All other participants were either married or in a committed relationship. Table 4.1 provides a breakdown of further sample characteristics, whereas Tables 4.2 and 4.3 provide additional detailed information about individual participants.

Based on BMI classifications, three African-Americans and six Afro-Caribbean participants were normal weight and half ($n=6$) of the Afro-Caribbean and almost all ($n=10$) of the African-American women were overweight or obese (Table 4.2). Some ($n=2$) of the overweight and obese Afro-Caribbean women indicated that they recently had babies (Table 4.3). The majority ($n=5$) of those Afro-Caribbean participants who were overweight or obese lived in the U.S. for more than four years; the other Afro-Caribbean woman who was overweight or obese was a more recent immigrant.

Table 4-2 Individual Participant Information (African-American)

PARTICIPANTS	BMI	Stunkard	
African-American	Categorization	“Ideal” Body*	Background Description
Aimee (22 years old)	Overweight	4	College education; single; grew up in the South (Miami); both parents from the French-speaking Caribbean country (Haiti)
Alana (30 years old)	normal weight	4	College education; single; >\$50K household income; grew up in the North (Maryland), then in the South (Georgia)
Alicia (31 years old)	Obese	6	Some college education; single; \$30K-50K household income; grew up in the South (Georgia)
Adriana (28 years old)	normal weight	3	College education; single; \$30K-50K household income; grew up in the North (New York)
Amber (30 years old)	Obese	3-4	Post-grad education; in committed relationship; >\$50K household income; grew up mainly in the South (Texas, New Jersey, Alabama, Georgia) and lived in Germany for a short while as a child
Amy (24 years old)	normal weight	4-5	College education; singles; >\$50K household income; grew up in the South (Georgia)
Ada (51 years old)	obese	5	Post-grad education; married; >\$50K household income; grew up in the North (Chicago)
Adalyn (39 years old)	obese	3-4	Post-grad education; married; >\$50K household income; grew up in coastal area in the West (California)
Aileen (51 years old)	obese	4	Some college education; single; grew up in the West (Ohio) and then North (New York)
Alexis (40 years old)	overweight	3	College education; married; >\$50K household income; grew up in coastal area in the North (Virginia)
Alison (43 years old)	obese	4-5	College education; married; >\$50K household income; grew up in the Midwest (Kansas)
Abigail (50-65 years old)	obese	3	Post-grad education; married; >\$50K household income; grew up in the South (North Carolina)
Amanda (33 years old)	overweight	4	College education; single; \$30K-50K household income; grew up in coastal area in the West (California); family from the South

* Indicates selection for what they believe the “ideal body” looks like from the Stunkard chart options

Table 4-3 Individual Participant Information (Afro-Caribbean)

PARTICIPANTS	BMI	Stunkard	Background Description
Afro-Caribbean	Categorization	“Ideal” Body*	
Camille (23 years old)	obese	3-4	College education; in committed relationship; >\$50K household income; 7 years in U.S.; grew up in St. Kitts; recently had a baby
Carmen (32 years old)	overweight	2-3	College education; married; >\$50K household income; 6 years in U.S.; grew up in the Bahamas
Carolyn (20 years old)	normal weight	4	Some college education; single; 6 years in U.S.; grew up in Jamaica
Casey (25 years old)	normal weight	2-3	College education; single; \$30K-50K household income; 6 years in U.S.; grew up in the Bahamas
Catherine (32 years old)	normal weight	3	College education; married; >\$50K household income; 4 years in U.S.; grew up in Jamaica; recently had a baby
Charmaine (30 years old)	normal weight	3	High school diploma; in committed relationship; \$30K-50K household income; 1 year in U.S.; grew up in Jamaica
Caitlin (38 years old)	obese	3	College education; married; >\$50K household income; 5 years in U.S.; grew up in Jamaica; married to an American
Carla (33 years old)	overweight	3	High school diploma; married; \$30K-\$50K household income; 8 years in U.S.; grew up in Jamaica; recently had a baby
Cecile (55 years old)	normal weight	3	Some college education; married; < 1 year in U.S.; grew up in Jamaica
Chantel (45 years old)	normal weight	5	Some college education; married; <\$30K household income; 7 years in U.S.; grew up in Jamaica
Charlene (47 years old)	overweight	4	Some college education; single; \$30K-50K household income; 8 years in U.S.; grew up in Jamaica
Cherise (33 years old)	obese	3-4	College education; married; 1 year in U.S.; grew up in St. Kitts

* Indicates selection for what they believe the “ideal body” looks like from the Stunkard chart options

4.1.2 Dominant identity

To help determine some of the factors that may enhance the relevance of health-related messages, participants from both groups were asked to talk about the aspect of their identity that was most important to them. There were both similarities and differences that emerged for the two groups. Being a mom was among the top dominant identities among women in both groups. Other dominant aspects of their identity were family, faith, and profession for African-American women and individuality and nationality for Afro-Caribbean women.

For the African-American women, two aspects of their identity were equally identified as most important ($n=4$ for each): family (being mom and being a part of their family)—“the fact that I am a mother” (Abigail, African-American, gave her age as 50-65 years old) and “being a part of my family” (Amber, African-American, 30 years old); and faith—“definitely the fact that I am a Christian and that I am a mother” (Alexis, African-American, 40 years old) and “my moral beliefs and my faith” (Alana, African-American, 30 years old). For an additional three African-Americans, their profession was the most important aspect of their identity.

Four Afro-Caribbean participants indicated that being accepted as who they are as individuals was most important—e.g., “The most important aspect is the way people see me, my character. I always try to be respectable to people” (Cherise, Afro-Caribbean, 33 years old). These participants included one person who elaborated that she wanted to be “recognized as a human being who has values, goals, and ambition outside of my son that I would like to accomplish” (Chantel, Afro-Caribbean, 45 years old). The second most dominant theme for this group (each mentioned by three of the women) was being a mom and their nationality—e.g., “I am still Jamaican born. That means everything to me” (Caitlin, Afro-Caribbean, 38 years old); “that I am from a different country and I am a mom (Carolyn, Afro-Caribbean, 20 years old). Two Afro-Caribbean women (16.6%) said their faith was the most important aspect of their identity.

4.1.3 Communicating with members of current close family and friends

To identify similarities and differences in the role of the social environments on the obesity-related behaviors of African-Americans and Afro-Caribbeans, this study explored the communication norms between participants and their close family and friends. Participants were

asked about their communication habits, including the frequency and modes of communication between themselves and members of their social environments. This was important because it provided further insight into the influence of respective social environments on the behaviors and attitudes of participants. More ($n=7$) African-American participants mentioned keeping in touch with friends on a regular basis than did Afro-Caribbean women ($n=2$). Examples of comments from African-American participants included: “My girlfriend in Texas, we talk once every three weeks or so. And the one in Atlanta, she comes over once a week” (Alexis, African-American, grew up in the North, 40 years old), “whenever something pops up, so that is sporadic, throughout the day” (Alicia, African-American, 31 years old), and “a couple of times in a month” (Amy, African-American, grew up in the South, 18-32 age group). Another participant said she communicated with friends “once a week” (Alison, African-American, 43 years old). One of the Afro-Caribbean women indicated that she maintained communication with friends “every day” (Carmen, 32 years old).

Communicating with family was important to both African-American and Afro-Caribbean participants. Responses from African-Americans indicated that, on average, these women made contact with parents and siblings on a regular basis. For example one woman said communication with her family included, “One sister, once a week, the other sister once a month” (Aimee, African-American, 22 years old), while another said she made contact with, “[M]om twice a week. ... sister ... on Sundays” (Adalyn, 39 years old). Others stated that they communicated with: “Aunt and Uncle a couple of times a month” (Alison, African-American, 33-65 age group); and “sisters and mom daily” (Alexis, African-American, 33-65 age group). Although both groups of women communicated with friends and family on a regular basis, there seemed to be more frequent communication between Afro-Caribbean women and their family

members. Whereas African-American women tended to indicate that they communicated with their family a couple of times per week or monthly, Afro-Caribbean women tended to indicate daily communication with family. For example, one Afro-Caribbean woman said, “Sisters, brother, grandmother. I talk to them every other day. ... Almost every day” (Carla, Afro-Caribbean, 33 years old). Carla also shared that they, “grew up pretty close back home and so we want to keep that bond ... sister, brother, grandmother, every day” (Carla, Afro-Caribbean, 33-65 age group). Another said, “We keep in touch every day or every other day” (Carmen, Afro-Caribbean, 32 years old) and yet another Afro-Caribbean woman said, “My mom? Maybe 10 times a day. Yes, that’s how close we are. Anything that comes up, ‘hey mum.’ If she remembers something and she wants to tell me she calls” (Cherise, Afro-Caribbean, 33 years old).

Participants were also asked to talk about the communication channels they use to keep in touch. Both groups of women utilized multiple communication media. In general, besides talking on the phone, texting was the most frequently used method for keeping in touch. Both groups of women also used Facebook, email, and Skype. Facebook was used mainly with friends. African-Americans reported keeping in touch by texting more than by other means of communication. For example, texting was used to just keep in touch or whenever special occasions, such as planning weddings, required frequent communication. Skype was used for occasions, such as when someone has a baby. Afro-Caribbean participants shared a wider variety of channels for maintaining communication with friends and family. Besides those mentioned above, these participants reported that they also use WhatsApp (for texting and free phone calls) and Tango for video-chats. One Afro-Caribbean participant explained that she and her family members made intentional decisions regarding their choice of phone and phone plans so that they could stay in touch. For example, they all agreed to have iPhones to communicate via Face Time.

Overall, compared to African-American participants, the Afro-Caribbean women seemed to maintain more frequent communication with family members from their childhood social environment. Also, besides utilizing a wider variety of communication channels, they seemed to be more deliberate about maintaining communication via audiovisual modes.

4.1.4 Beliefs about obesity in the United States

In order to gauge their obesity-related beliefs, participants were asked about the extent to which they thought obesity was a problem in the U.S. All women agreed that obesity is a major problem in the U.S. Answers included, for example, “I think it is a major problem in general” (Amber, African-American, 30 years old); “It is a pretty big and deep problem” (Amy, African-American, 18-32 age group); “To a great extent” (Chantel, Afro-Caribbean, 45 years old); and “It’s a major problem” (Catherine, Afro-Caribbean, 32 years old). Participants were also asked to talk about whom they thought was most affected by obesity. The majority of participants from both groups were of the opinion that most people were affected by obesity. Two of these responses are: “Everybody means men, women, children, young, old” (Aimee, African-American, 22 years old); “Everybody is affected, family, employers, everybody in the social circle is affected” (Caitlin, Afro-Caribbean, 38 years old).

In elaborating on the question about who was most affected by obesity, one African-American woman said:

Everyone is at risk. Just depends on the choices they make. I think society makes it hard when you have fast food options and also, it makes it hard because the prices are so cheap. I could feed my whole family on \$5 in the drive through as opposed to buying fruits and vegetables.... [I]t is ridiculous how expensive that is. I can imagine a parent thinking in their mind ‘I can feed all of my kids in a drive-through as opposed to taking

that same \$5 and walked into a Kroger, Walmart, or Publix. Who knows what I will get?’ The amount of grocery stores and farmers markets, food prices and all of that fall into people’s options. Stress has a lot to do with it; time has a lot to do with it. Everyone is at risk. A family of four that is seemingly healthy mom and dad have a job and they are working overtime and they don’t have time to get to a grocery store, and they just decide to pick up something on the way home because it is easier at the moment and that could go on and on and on. Even if they do have money to go to grocery store, it is convenience and time. (Aimee, African-American, 22 years old)

Although concurring with this point of view that everyone is affected, one Afro-Caribbean woman was less sympathetic:

I notice that persons who are from Jamaica, when they were there they were nice or proportioned but then now they are extremely fat. If you asked nicely, they will tell you about the food here. As they come here and settle here for a year, by the time they visit in Jamaica, hmmm. They say it is the cheap food but that really it has nothing to do with the price of cheese, really. (Cecile, Afro-Caribbean, 55 years old)

Both groups talked about the impact of obesity on children, but twice as many Afro-Caribbean women mentioned children. Examples of these comments from Afro-Caribbean women included one from a woman who shared that she thought those affected were, “mostly the younger generation more than ever because of the way the parents are feeding them and introducing them to fast foods and fatty foods” (Camille, Afro-Caribbean, 23 years old). Another Afro-Caribbean woman expressed:

It is a problem from the kids are in school. My son, that’s why I am trying to get him to eat more healthy. ... He has always been solid. ... He still has the tendency to put on

weight and his brother is always trying to tease him into exercising because he is the skinny one. He is very conscious of himself and he is always like, 'mom, go to Wendy's,' and I say, 'I'm not going to Wendy's.' 'Mom go to Chick-Fil-A.' 'I'm not going to Chick-Fil-A.' 'Mom go to Subway.' 'I'm not going to Subway.'

She went on to contrast habits she practiced while living in the Caribbean, "[W]hat we did when we were there in Jamaica is that, stuff like that was a treat. When you had KFC. It was a treat. Once a month. It was a treat. That's it!" (Charlene, Afro-Caribbean, 47 years old). An example of African-American women's comments that mentioned children was, "I think it is a huge problem especially in elementary schools when you see children that are the size of high schoolers" (Alana, African-American, 30 years old).

Both African-Americans and Afro-Caribbeans placed responsibility for obesity among children on parents. One African-American woman was very direct in blaming parents. She said:

I blame it on the parents. I talk to my mom and sister about this all the time because kids will eat what you give them and if they are in the house playing video games, it's because you allow them ... force them to go out and play even if they don't want to (Alana, African-American, 30 years old)

An Afro-Caribbean woman explained:

Parents are introducing children to fast food instead of going home and cooking a balanced meal like we did back home. So, kids grow up on McDonalds, and Burger King, and Wendy's. That's their dinner, breakfast, and lunch. And then, they are not getting the proper exercise. They stay home playing video games on the computer and reading books

and they are not getting the exercise like we would back home climbing trees, riding bikes, walking.

She also expressed that because of those factors, “I think that the obesity here in America is only going to get worse (Camille, Afro-Caribbean, 23 years old).

Both African-American and Afro-Caribbean women said African-Americans were more affected by obesity than other ethnicities. Here are some of their comments: “I think definitely African-American community is more affected” (Amanda, African-American, 33 years old); “I feel that it disproportionately affects African-Americans” (Amy, African-American, 24 years old); “Really, I think it affects African-Americans more.” (Carolyn, Afro-Caribbean, 20 years old). Afro-Caribbean participants did not offer any attribution for this disparity but one African-American said:

I think definitely [the] African-American community is more affected. Am I saying that we are the most obese? No. But, I am saying that we are most affected. I don't think that genetically we are made to be that big and there are a lot of things that we incorporate in our bodies that we were not made to incorporate and that affects us physically and it affects our health. (Amber, African-American, 30 years old)

She added that the foods eaten by African-Americans is the reason “why a lot of Black people have heart disease and diabetes.” (Amber, African-American, 30 years old) She traced the eating habits to slavery:

[H]istorically, we did not eat these kinds of things and so when these things are passed down ... when a generation grew up on pig scraps that may have contributed. ... I think that originally, Whites were eating more, the big meals, the red meats, and things like that and when you bring Africans from one country to another and then change their diet, that

is a body shock and so I think that is why there is that difference. Not only was it thrown on us, but, we weren't eating the healthy parts of foods. We were getting the worse parts. (Amber, African-American, 30 years old)

Another African-American attributed the obesity disparity not just to, "A history of oppression and the way that the system has been set up because of the history of oppression" (Amy, African-American, 24 years old), but she also talked about the origins of "Soul food":

I have read that where Soul food comes from is like having the leftovers or the unwanted parts. Like ham hocks. Those were the leftover parts that the plantation owner did not want, they would give to the slaves. That made me think that this is the way that we have been eating for hundreds of years and it goes so far back. It's hard to separate history and what happened from where we are now.

She did express, however, that, "How credible it is, I don't know" (Amy, African-American, grew up in the South, 24 years old).

Two participants—one African-American and one Afro-Caribbean woman—thought that income was a contributing factor to obesity. The African-American woman spoke from the position of what she observed in her own family:

I see it in my family. At the same time, I don't feel like we make better decisions. Some people don't have the financial means to make those better decisions. ... I have this conversation with my friends all the time. It is a lot easier to eat unhealthy because it is convenient and it is much cheaper. (Amanda, African-American, 33 years old)

While also supporting the position that people in lower income groups were most affected by obesity, the Afro-Caribbean woman gave a more general perspective:

The lower income persons are more affected because you are trying to let a dollar stretch. I think the lower-class of people (the ones that make the less income) are more affected. They are not going to the hospital, not getting checkups regularly, they are not buying the healthier foods. ...They are not interested really in health, they are interested in eating. They are interested in trying to feed their family. They can't just go and buy a gym membership and invest in all these things. (Casey, Afro-Caribbean, 25 years old)

Gender was also discussed. An Afro-Caribbean woman said, "I honestly think that women gain weight quicker than men so I think it affects more women than men" (Carmen, Afro-Caribbean, 32 years old). While an African-American woman (who grew up in the North) suggested, "It seems to be more acceptable for men to have a little extra weight whereas for a woman it may not be as acceptable. Emotionally, they might pack on some more" (Alexis, African-American, 40 years old).

Overall, African-American and Afro-Caribbean participants had similar views on some obesity related issues specific to the United States. For example, both shared the view that obesity was a major problem, that most people are affected, that lower income groups are more affected, that African-Americans are more affected than other ethnic groups. Both groups shared a concern for the effect of obesity on children and attributed blame to parents. Despite these similarities, African-American and Afro-Caribbean participants differed with respect to other obesity-related attributions. African-Americans stated that convenience of fast food locations and affordability compared to healthier foods and Soul food diet that was developed during slavery were to be blamed for obesity. On the other hand, one Afro-Caribbean participant attributed obesity to choices that individuals make. Finally, in mentioning gender relative to obesity, whereas one African-American participant shared the view that larger bodies are more

acceptable in men, an Afro-Caribbean pointed out that women are more susceptible to weight gain.

4.1.5 Summation of sample description

There were some similarities and differences between the African-American and Afro-Caribbean segments of the sample for this study. First, the age ranges and average age of both groups were comparable and almost all participants had completed at least some college education. Second, for women in both groups, being a mom was among the top choices for the aspect of their identity that was most important. Third, women in both groups concurred that obesity is a major problem the United States and had similar opinions regarding who was most affected and some contributing factors; women in both groups said parents and socioeconomic factors were to be blamed. However, participants also differed slightly in terms of these same factors. Demographic differences included marital status—more than twice as many African-Americans as Afro-Caribbean participants were single—and household income—twice as many African-Americans than Afro-Caribbean women indicated that their household income exceeded \$50,000 per year. For identity differences, family, faith, and profession were among the top choices for African-Americans whereas, for Afro-Caribbean women, their individuality and nationality were the top choices. Regarding obesity beliefs, only African-Americans blamed environmental factors. The groups also differed in terms of obesity—most of the African-Americans, but half of Afro-Caribbean women were overweight or obese—and communication within their social environments—compared to African-Americans, Afro-Caribbean women indicated more frequent communication with members of their childhood social environment and they used a wider variety of communication devices and applications; compared to the Afro-

Caribbean women, the African-Americans indicated more frequent communication with their friends.

4.2 Obesity-related norms of social environments

The first sets of research questions explored the similarities and differences in the obesity-related norms of the childhood (i.e., the social environments in which participants grew up) and the current social environments. Each question examined the childhood and current socio-environmental obesity-related norms—(1) food, (2) physical activity, and (3) body image—of (i) African-Americans, (ii) African-Caribbean immigrants. Both groups were then compared with regard to these norms

4.2.1 Food-related norms

The first research question, RQ 1a, sought to identify the food-related norms of the childhood social environments of (i) African-American women and (ii) recently immigrated Afro-Caribbean women, and (iii) explore how the two groups are similar and different.

(i) *Childhood environment of African-American women.* To find out about the food-related norms that existed in participants' environments, they were asked to talk about the kinds of foods they remember eating as they were growing up, and to share about the preparation methods. In general, African-Americans had a negative attitude toward the food-related behaviors modeled in their childhood environments. They talked about unhealthy Soul food, fried, fatty, greasy foods eaten in the communities in which they grew up more than about any other aspect of their food experiences. Some of the comments included these three from women who grew up in the West or North: "Everything fried...vegetables has a layer of grease" (Amanda, African-American, 33 years old); "fried, fried, fried" (Ada, African-American, 51 years old); and "We ate a lot of fried chicken. She used Crisco" (Alana, African-American, 30

years old). One woman from the West said, “Everything was fried ... fried apple pies ... no nutritional value” (Aileen, African-American, 51 years old); and a woman from the South said, “I grew up on fried foods” (Amy, African-American; 24 years old).

The food choice and methods of cooking for the African-American women reflected both the norms for the geographic region in which they grew up and their parents’ cultural backgrounds. For example, those who grew up in coastal towns said they ate a lot of fish and seafood as they were growing up. One woman, who grew up in a coastal area in the North and later moved to the South said that while they lived in the coastal area they “ate a lot of seafood. It is called the crab-capital. ... We would prepare the blue crab, pile it on the table and just go at it all day, with sweat bands” (Alana, African-American, 30 years old). She added that, although seafood is considered a healthier alternative to other meats, the preparation methods were not always healthy:

[We] ate a lot of seafood and shrimp prepared the same way ... with old bay, a lot of salt ... traditional foods like spaghetti ... a lot of fried chicken ... We did not eat the worst as far as health but we did not eat the best either because we had a lot of salt in our food.

(Alana, African-American, 18-32 age group)

Another woman who grew up in a coastal town in the North, also said she ate a lot of fish growing up but thought their diet, which was influenced by her parent’s upbringing in the South, to be unhealthy:

My mom was from Virginia but her family was from North Carolina. . . My father was from Gullah Islands in South Carolina so we had a lot of rice. . . We ate a lot of North Carolina things like barbeque, spaghetti with green beans, rolls, fried pork chops with

spinach and rice. My mom was making stuff from sugar and real butter. (Alexis, African-American, 40 years old)

Yet another woman, who was from the West (but whose family was from the South), found the eating norms of her family to be completely different from those of her friends. She shared that, for her family:

We ate a lot of corn bread and greens. I grew up eating everything—pork, meat, chicken, turkey ... everything fried. If anything was baked, it was almost like looked down upon in our household. Everything was cheesy and greasy ... even the vegetables had a layer of grease and fat laying over it. There was nothing healthy about the food that I ate. Even the salads were heavy with ranch and cheese.

She contextualized the differences with her friends and schoolmates and explained her “White versus Black” perceptions of these differences:

I grew up in a predominantly White environment as far as education was concerned. I went to a private school and there were just speckles of Black kids and Latino kids and Asian kids. In the school, I felt there were different types of eating habits. I felt there was the way White people ate, and there was the way Black people ate, and they were completely different. At school, I felt like my meals were balanced; there was proportion. We had more green salad and things were baked, we had healthier snacks, we had fruits, and we did not have a lot of artificially flavored juices; they were natural juices. I was like, ‘this is the worst, I can’t wait to get home and really eat.’ So, I felt like I had two different diets. My Monday to Friday, 7:00 to 3:00 diet and then my 4:00 ‘til I went to bed, diet” (Amanda, African-American woman, 33 years old).

A multiplicity of cultural influences on dietary norms was also evident among other African-American women from both the North and South. These cultural influences were both international and local. For example one woman who grew up in the North said: “There was a mixture of Soul food and Spanish food” (Adriana, African-American, 28 years old). Some of the international influence originated from the parents of African-American participants. Two women from the South spoke about how their parents incorporated food from their home countries and other cultures into their diets: “My parents are Haitian so my mom cooked Haitian food. Miami is like a melting pot of the Caribbean – a lot of pastries, Cuban bread, a lot of rice” (Aimee, African-American, 22 years old); and “Mom would make bread, sausage, egg, cheese sandwiches, Eggo Waffles or Nigerian food. The standard is rice and a tomato stew. A lot of Nigerians eat Iyan—yams boiled and pounded into a dough—or dodo—fried plantains and stew” (Amy, African-American, 24 years old).

Food-related choices were deemed a symbol of identity among the African-Americans. Amanda, discussed above, perceived that there was a way that Whites ate and a way that Blacks ate. For others, like Amanda, it was made evident that for some African-Americans, it was considered somewhat of a betrayal of one’s class and cultural identity to try to eat any other way besides how one grew up. Amanda expressed that adhering to her family’s diet was considered important to those with whom she grew up:

Culturally, some things you did not know because it was considered Bousie. I moved to New York to live and went back home to visit. One of my [childhood caregivers] asked [where I wanted to eat] and she said she was glad that I did not move up to New York and get Bousie (that is from Bourgeoisie). [It means] uppity, like going to a fine restaurant; selling out. So, for some people They might know there is a better way,

but this is just what they do. My godfather says ‘just fry my stuff and I want Pepsi.’ He has major health problems. (Amanda, African-American, 33 years old)

Overall, African-American participants shared negative perceptions of the food-related norms of their childhood environments. They described food choices and preparation methods as unhealthy. Food-related behaviors were influenced by geographic region, parental background, and cultural variety that existed where African-Americans grew up. For some African-Americans, food choices were perceived as symbols of class and ethnic identity.

(ii) *Childhood environment of Afro-Caribbean women.* The Afro-Caribbean women described the Caribbean food as “natural,” “wholesome,” and “healthy.” For example, “We had the privilege of eating everything from the farm naturally...nicely cooked...we had healthy food” (Caitlin, Afro-Caribbean, 33-65 age group); and “my mother was into healthy eating” (Camille, Afro-Caribbean, 18-32 age group). Another Afro-Caribbean woman described, “[We] didn’t use a lot of salt...we tried to use natural seasoning... not much oil. We did not drink a lot of artificial juices. We had predominantly lemonade because we had a lime tree in the back of the yard. We had mango trees, sour-sop trees...so we had everything...prepared at home” (Catherine, Afro-Caribbean, 18-32 age group).

For the Afro-Caribbean women, food choice norms in the environments in which they grew up were very similar, despite the fact that they grew up in different countries. Food was mainly home-grown or locally-grown produce—vegetables, fruits, peas, beans, and starch tubers such as yams and potatoes. “Growing up there, we had a variety. We had lots of choices. Parents were farmers so I had access to ground produce -yams, bananas, potatoes, vegetables, poultry. We had everything. We had the privilege of eating everything from the farm naturally” (Caitlin,

Afro-Caribbean, 38 years old). Some women gave additional details about the foods they ate.

One said:

I ate a lot of stuff – breadfruits, yams, sweet potatoes, white potatoes, what we call blue edos it is like a yam and small and round; vegetables, mangoes – soursops, guavas, sour oranges (we used these for medicinal reasons, if you have a cold, we would suck on it, we also made drink with it). We had guineps [fruit]. For vegetables we had broccoli, cabbage, green beans. We grew our own peas in the back yard – pigeon peas and the green lima beans. We had okras, egg plants - we called it tuber. We had a lot on a regular basis. (Cherise, Afro-Caribbean, 33 years old)

The Afro-Caribbean women also grew up on a variety of soups. One woman stated it like this:

“Saturday was soup day. There was no deviating. Peas soup, red peas, gungo peas, and we put in yams and meat...chicken soup” (Charlene, Afro-Caribbean, 47 years old). Their meats, which mainly included chicken, pork, goat, and sea-caught fish.

Food preparation methods were also very similar among the Afro-Caribbean participants. They said, however, that it was customary to use a wide range of cooking methods. Preparation methods for meats mainly included baking, currying, stewing, or jerking (a particular type of seasoning mixture, followed by cooking). “Meats were mainly fried, stewed, steamed, or curried” (Carmen, Afro-Caribbean, 32 years old); “Meat was mostly baked; fish – some fried fish, baked fish, pork (baked), ham and stuff like that” (Camille, Afro-Caribbean women, 23 years old); “We had chicken, baked or stewed. Pork was either baked or stewed. We had beef, usually stewed, and made goat water.... Fish would be either fried or steamed.” (Cherise, Afro-Caribbean woman, 33 years old).

Afro-Caribbean participants perceived the food-related norms of their childhood environments as being healthy, wholesome, and natural. There was very little difference among the Afro-Caribbean participants in terms of the food type and preparation norms within their childhood environments. However, all women described a wide variety of food types and cooking methods.

(iii) Similarities and differences in norms of childhood social environments. RQ 1a explored the food-related norms of participants' childhood environments. There were similarities for a few participants, but mainly differences between the African-American and Afro-Caribbean participants with respect to food norms in their childhood environments. For example, similar to the Afro-Caribbean participants, African-Americans who grew up in coastal areas consumed fish frequently. In terms of differences, there was a lot more variety in the food types and cooking preparation norms described by the African-Americans than the Afro-Caribbean women. The variety in food type and cooking method norms of African-American women was influenced by the backgrounds of parents, school environment, geography, and cultural diversity where these participants grew up. On the other hand, Afro-Caribbean women described many different food types and cooking methods but they were similar among all these women despite having grown up in different Caribbean countries. Another difference between the two groups was the attitude toward food norms within their childhood environments. Afro-Caribbean participants viewed their childhood food norms as healthy, wholesome, and natural, and procured from home or other local sources. They described soups, stews, baked, steamed, jerked, curried and some fried foods. African-Americans viewed their food-related norms as unhealthy, fried, greasy, overcooked, and lacking in nourishment. Additionally, they did not mention home-grown food or

other food sources. Finally, the health aspect of food seemed to be more relevant in the childhood social environment of Afro-Caribbean than African-American participants.

The second part of the first research question, RQ 1b, sought to identify the food-related norms of the current social environments of (i) African-American women and (ii) recently immigrated Afro-Caribbean women living in Metro Atlanta, Georgia, and (iii) explore how the two groups are similar and different.

(i) Current environment of African-American women. Most of the African-American participants indicated that their current family and friends did not eat many fried foods and generally tried to eat healthy (even when eating “Soul food.”). In describing the healthy habits and favorite foods of her close friends, one African-American woman said, “She [my friend] is always grazing and she always had healthy snacks in her cupboards and she was always drinking lots of water. My friends are all pretty healthy ... and do juicing.” She gave a specific example of one couple: “One rehearsal night one couple roasted chicken and made an amazing salad with strawberries in it. They made home-made olive oil dressing.” She also shared that this family drinks “lots of water. ... [T]heir drink of choice.” She said that, in general, her friends’ favorite foods were “chicken and turkey” and that, occasionally, they may deviate from healthier foods: “When we have our Super Bowl parties, we have casseroles and so but that is not the norm” (Aileen, African-American, 51 years old). Despite admiring these healthy choices of some of her friends, however, this woman was bothered by the total commitment of one family in particular: “[Y]ou cannot find any junk food in their house, which bothers me. But this is just the healthy choice they have made.”

Other African-American participants shared that members of their current social environment made healthy food-related choices in their food preparation methods. One woman

who grew up in the South said, “My boyfriend likes salmon, baked with broccoli or green peas and rice. My mother, bake-fries chicken (bread crumbs to get the crunch, but baked) and greens (collards, turnip) and peas” (Amber, African-American, 30 years old). Some women talked about members of their current environment making healthier choices in food preparation methods, even as they prepared the same types of food. For example, one African-American from the North said that although eating a lot of seafood was something she and her friend have in common, “they do also eat [S]oul food, similar to when I was growing up.” She explained, however, that, whereas her, “mom would use butter and pork fat [to cook Soul food],” her current friends, prepare the Soul food differently to make it a little healthier (Adriana, African-American, 28 years old).

Similar to the childhood environment of African-Americans, there was a lot of variety in the foods consumed within the current social environment of these participants. Some women attributed this variety to the personal preferences of their friends and family to enjoy a variety of foods. One participant said that although, “[o]ur favorite go to is rice and chicken with vegetables; chicken baked or broiled or simmered, a lot of sauce made from the chicken with tomato base,” her friends are, “[A]ll so eclectic ... beans and white rice, salsa, tortilla chips, guacamole” (Aimee, African-American, 22 years old). Another African-American woman was not sure what to name as the favorite foods for her friends, but she said, “[W]hen we do get together, it seems like we predominantly end up at Mexican or Cuban type place” (Alison, African-American, 43 years old). Although Alison’s friends prefer Mexican and Cuban foods, her husband’s favorite meal is, “curry goat with rice and peas and plantains and Johnnycakes.” She added that she has “never cooked it” and “never even purchased it, so whenever he wants it he has to go and buy it.” (Alison, African-American, 18-32 age group). Yet, another African-

American woman attributed the variety to ethnic differences among her friends. She said, “My closest friends are of different ethnic heritage – So, El Salvadorian sandwiches. Another friend is Korean and she likes soups made with spam and fermented cabbage” (Amy, African-American, 24 years old).

Although many African-American participants said that members of the current social environments make healthier food-related choices than the norms of their childhood environments, there were a few women who indicated that some of their family and close friends were still influenced by their childhood environment. For example, Alicia shared that friend, “is more of a Soul food person because that is what her mom cooks. It is usually cooked in butter and extra seasoned and very comfort-food-ish. Her mom cooks a wide variety of things” (Alicia, African-American, 31 years old).

In general, African-American participants described healthier food-related norms within the current environments than they did for their childhood environments. In some instances, even where members of the current environment prepared the same types of foods from their childhood environments, they tried to use healthier methods. However, there were African-Americans for whom members of their current social environment continued the less healthy meals modeled within their childhood environment. Members of the current environments of some African-American participants were similar to those of their childhood environments in terms of the variety of foods that they consumed. One factor that seems to have contributed to this is that the African-Americans tended to have friends of different ethnic backgrounds.

(ii) *Current environment of Afro-Caribbean women.* For Afro-Caribbean women, food norms of their current close friends and family, though mainly Caribbean, varied between American and Caribbean food and cooking methods. ‘Healthy’ was one of the main themes

included in participants' descriptions of the way their current close family and friends ate. In speaking about the favorite meals of her friend and family within her current environment, one Afro-Caribbean woman, rather than talking about foods, per se, shared that their emphasis was on healthy lifestyle, all around:

She [mother] would say the same thing, 'child you better eat right.' 'Stop using this' and 'don't use that.' ... ' Before, I was using parboiled rice she cut me out from using that to using whole grain rice now and she is still on me with the salt. Even though I don't use it, she makes sure I don't use it in things I prepare. When she [grandmother] calls, she says, 'You still eating right?' And, I say, 'yes, I am still eating right.' Exercising and eating right are the two topics all of them would say that I should do right. (Carla, Afro-Caribbean, 33 years old)

Others gave specific examples of health reasons for the food choices of members of their current social environments. For example, one woman said "I know she is very conscious about her diet. Her cholesterol and calcium intake and her health. (Chantel, Afro-Caribbean, 45 years old).

Another talked about her health-conscious friend from Ohio, "She eats pretty healthy. She puts on events. Like, she did one for breast cancer and she had people come in to show us how we can eat natural things and stuff that we can use." (Charlene, Afro-Caribbean, 47 years old)

With a few exceptions, Caribbean foods were the norm among family and friends within the current social environment of Afro-Caribbean women. For example one woman said she knows that her good friend liked fish. She was not sure that her husband had any favorites, but said that he seemed to like variety of Jamaican foods prepared in Jamaican style. She said: "[He likes] a little ackee and salt fish [Jamaican dish] and a little fish and a little stewed peas [Jamaican dish] and vegetables. He likes his plate looking attractive, pretty, with a small quantity

of different varieties. He loves fruits” (Chantel, Afro-Caribbean, 45 years old). Cecile said that her husband loves pork, prepared in any way, but other people that are closest to her since living in Atlanta, prefer “chicken and fish, stewed, baked. The preparation method is similar to how they are done in Jamaica” (Cecile, Afro-Caribbean, 55 years old). The closest friends and family members of another Afro-Caribbean woman “love Jamaican food. ... What I see them eating most is salads. ... They have protein with it” She added that her sister “loves ackee and salt fish” [Jamaican dish] (Charlene, Afro-Caribbean, 47 years old).

One Afro-Caribbean participant, Carla, said that her family members also prefer Caribbean foods and preparation methods but her friends were different. She said, “My husband’s favorite foods are rice and peas and baked chicken. Mom likes fish. My grandmother likes brown stewed chicken and curried chicken with rice and peas.” Regarding her friends she said, “They like fried chicken. Some are from the States and Jamaica and some of the other Caribbean countries” (Carla, Afro-Caribbean, 33 years old).

A few Afro-Caribbean participants had both family and friends in their current social environment that preferred American food. One woman said that her husband’s favorites were, “burgers, pizza, steak, French fries, donuts” (Carmen, Afro-Caribbean, 32 years old), while another said that the majority of her friends “go for a lot of spaghetti and American food, pasta, and those stuff, fried foods, burgers.” This particular Afro-Caribbean woman was concerned about her husband’s diet. She said, “I have to be on his case really to try to stay on the healthy side” (Caitlin, Afro-Caribbean, 38 years old).

In general, Caribbean foods types and preparation methods were the norm among the members of the current social environments of Afro-Caribbean participants. Like members of their childhood environment, members of participants’ current social environments were very

concerned about eating healthy and consistently monitored participants' food-related habits. A few Afro-Caribbean participants said they had members of their current environment that ate less healthy foods—fried and American foods.

(iii) Similarities and differences in norms of current social environments. RQ 1b explored the food-related norms of participants' current social environments. Both African-American and Afro-Caribbean women said that the food-related norms of their current close friends and family included at least some healthy choices. For both groups of women, there were instances where the food-related norms within current environments were similar to those of their childhood social environments, but in other instances, they were different. As was the case pertaining to the childhood food environment for African-Americans, they indicated that there was a lot of variety in the food norms of their current social environment. Some said that the norm for their current friends and family was Italian, Chinese, Mexican, and/or Caribbean food. Most African-Americans described "Soul food," but in some instances indicated it was cooked slightly differently to make it a little healthier. Afro-Caribbean women indicated that the foods in their current environment were similar to those from their childhood environment, but also included some less healthy norms, including American foods.

The main difference between the two groups of participants was that African-Americans indicated that compared to their childhood environment, more persons within their current social environment made food choices based on health priorities. For Afro-Caribbean women, whereas most of the people in their current social environment made health conscious food choices, all the persons within their childhood environment made similar choices.

4.2.2 *Physical activity norms*

The second research question explored the physical activity-related norms of the childhood and current social environments of (i) African-American women and (ii) Afro-Caribbean immigrant women, and examined (iii) how the two groups are similar and different. RQ 2a addressed these norms as they related to the childhood social environment.

(i) *Childhood environment of African-American women.* In general, children within the childhood social environments of all African-American participants ($n=13$) were very active.

One African-American woman said:

My neighbors are very active. They run, they play tennis, they are always in the gym, all my friends played sports or were in some kind of activity (basketball, running track – running track was big, playing baseball, softball). [The school county] was very diverse – multicultural; there was not a majority of anything. Then, when we moved to [another] county; everything from weight training to track and field to football and baseball. It was just the variety. ... I was a cheerleader. (Amber, African-American, 30 years old).

Another African-American shared that, “A lot of friends played basketball, football, track, cheerleading, volleyball. Friends were a mixture of ethnicities” (Amanda, African-American, 33 years old). However a few participants said that African-American boys were more physically active than girls. These comments may be summarized by Adriana’s: “Boys were more active; they played more sports” (Adriana, African-American, 28 years old).

Comments from two African-American women are indicative of transitions. The first indicated a transition because of a move from one region of Georgia to Atlanta. This participant recalled going outside to play with friends prior to moving to Atlanta. However, she said that that changed once they moved to Atlanta: “I don’t recall anything of the sort. I recall getting up,

going to school, coming home, doing work, occasionally hanging out with friends at their homes and vice versa or we go out and do things within the city, but I don't recall any kind of physical activity at all" (Alicia, Africa-American, 31 years old). The second participant indicated a transition from physically active children to less active adults, "[My] sisters played soccer, basketball, and softball. However, "once we hit high school we quit" (Alexis, 40 years old).

In general, adults in the childhood environments of African-American participants were not very active ($n=8$). Alexis shared, "I don't remember [my parents] doing any type of physical activity. I remember my dad joined the gym. My mom said, "Why don't you join that?" He eventually quit." She explained that she could not, "recall seeing the adults doing a lot of stuff at all. The adults were busy. Mom was in school, Daddy was working, they were at the church. I can't say it was the highest priority." The added: "As far as people that I grew up with ... their attitude is yes, it [physical activity] is there if I get around to it" (Alexis, African-American, 40 years old). Other woman shared similar stories. For example, one participant stated that her mother tried, but did not maintain a lifestyle of physical activity:

I can remember my mom having the Jane Fonda workout tapes and she would have different equipment. She used them and that tapered off after a while. I remember she had that thing you put your feet in and stretched in; that became a toy for me later. The treadmill became a coat rack. In her mind, there was an attempt but it never really went anywhere. I think I adopted that. (Alicia, African-American, 31 years old)

Although there was generally little physical activity among the adults in the childhood social environments of African-American women, two participants described walking out of necessity (to get from one point to another). They grew up in cities with limited private transportation ($n=1$) options and/or in "walking-cities" ($n=1$). Aimee grew up in the South. She

said, “My family relied on public transportation because it was not as it is here in Atlanta, where everyone needs a car. So, a lot of walking from bus stops and to trains and things like that” (Aimee, African-American, 22 years old), Adriana, who grew up in the North, said, “Walking is very common in New York, even though we have trains” (Adriana, African-American, 28 years old).

A few ($n=5$) African-American participants grew up in environments where adult involvement in physical activity was modeled more consistently. For example, Adalyn talked about the behaviors modeled by her parents:

When we would go to the gym with my mom quite a few time a week (maybe 4 time a week) and even on the days when we could to go, I would do aerobics in my room. I was very active. My mom was too. My sister was. My dad would even get up early sometimes and go for a jog. I did grow up seeing activity. Every summer we did swim lessons, we did roller blading a little on the beach as teenagers. When we were younger we did our bikes around the neighborhood. (Adalyn, African-American, 39 years old)

Amanda talked about the modeling of similar physical activity behaviors by her parents and family friends. She said, “My dad would take me to run with him but I would have my bike. My dad was very active. He would box and he would train boxers. ... Some of my friend’s parents were in law enforcement so they were active. Mom was in law enforcement” (Amanda, African-American, 33 years old).

In summary, generally, it was the norm for children to be very active in the childhood social environments of African-American participants. They were involved in various types of sporting activities but boys were more active than girls. The level of physical activity among children seemed to vary by geographic area; some participants indicated that when they moved

from one geographic area to another, they noticed a difference in the level of physical activity among children. In general, physical activity was not perceived as a priority, and adults were not consistent in their attempts to be physically active, or they were not active at all. In areas where there was limited private transportation and in walking cities, adults walked out of necessity. Few African-American participants grew up social environments where consistent physical activity behaviors were modeled. Activities included the gym, running, boxing, and physical fitness related to the professions of adults.

(ii) *Childhood environment of Afro-Caribbean women.* Walking was a natural way of life and a means to an end for everyone within the childhood environments of all Afro-Caribbean women, in general. All Afro-Caribbean women ($n=12$) spoke about how much walking they did. Some of the experiences included: “Walk[ing] from the house to the bus stop. They walked a lot. They walked a lot, in the market, to the bus stop; walked home with the load [food purchased at the market]. That was the activity, basically” (Charlene, Afro-Caribbean, 47 years old); and “[G]oing to the gym, not so much. Back home everybody walked everywhere they went. We did not have transportation like we have here in America. We walked to wherever we wanted to go. It did not matter. Five, ten, fifteen miles” (Camille, Afro-Caribbean, 23 years old). Those who lived in farming communities shared similar experiences. One woman said:

They were incredibly active. We used to walk 3 miles per day to school and 3 miles back. That was just for school. Church was not included. We walked about 6 miles a day just to get to school, church, to aunt’s house, to the grocery store. We walked for almost everything back then. The communities were mostly farmers; they walked to the farm. Everybody was walking. They were very, very active. My dad is 75 and he is still active.

He still does construction, farming. He's 100% healthy. (Caitlin, Afro-Caribbean, 33-65 age group)

Besides walking as a means of transportation, children within the childhood environments of all Afro-Caribbean participants ($n=12$; 100%) were involved in many sporting activities, but suggested boys were more active than girls. One participant stated that, "The kids were active, especially the boys. Not so much the girls. I think the girls stayed home and cooked and the boys were always on the road playing cricket and football" (Charlene, Afro-Caribbean, 47 years old). In general, children were active. They "played a lot of soccer and cricket and stuff like that" (Carolyn, Afro-Caribbean, 20 years old) and did a lot of "yard work and played outside because television was very limited" (Catherine, Afro-Caribbean, 32 years old). They also played "football team and the young ladies had a netball team...we were encouraged to come out and exercise with the guys so on a Saturday. They would have guys exercising and doing their thing and the girls exercising and doing their things" (Chantel, Afro-Caribbean, 45 years old).

Most of the Afro-Caribbean participants ($n=11$) shared that, besides walking, the adults at all stages of life in their childhood environments modeled involvement in a variety of physical activities. For example, one participant said:

The young adults recognized that we needed to keep active for health reasons so we got ourselves involved in exercising. There was not much push for gyms in the community or outside the community but in terms of the church, because, as young adults we would encourage persons, even the older ones. We would say we are having football match or football training. It was always encouraged that there is some social event and in terms of exercise was going on everyone was free to come and join and they be a part of the exercise for netball or... because it was an open thing whether anybody could exercise.

They just did throw ball and then eventually they formed teams. (Chantel, Caribbean, 45 years old)

Chantel also said that, “The older adults had a football team in the community. ... [A] senior football team that eventually is recognized now as a national team.” She explained that, “The older guys play on the team I’m not sure if the females did much but I think they may have had a netball team too.” (Chantel, Afro-Caribbean, 45 years old) Furthermore, there were also organized physical activities for the elderly: “On the weekends in our community, we will have sports days. The elderly man or woman play cricket, netball, or track and field. We have competitions. ... Ladies from [name of street] against ladies from [name of street].” (Carla, Afro-Caribbean, Afro-Caribbean, 33 years old)

The type of physical activity in which some adults were involved changed over time but they still modeled consistent physical activity behaviors. One Afro-Caribbean participant said:

The best thing to do was walk. You found a lot of people would walk in the neighborhood in the mornings or in the afternoons, or when they come from work. One by the one the gyms started opening and people would start going to the gym, maybe every day or twice or three times a week, however they could incorporate it in their busy lives. (Cherise, Afro-Caribbean, 33 years old)

In summary, all Afro-Caribbean participants described walking as a way of life for everyone in their childhood social environments in the Caribbean. They walked to and from school, church, relatives’ homes, markets and stores, and the farm. All children were involved in a variety of sporting activities including football cricket, netball, and track and field activities but boys tended to be more active than girls. They also played a lot outside in the yard and helped

with yard work. Adults of all ages were involved in organized physical activities including competitions at the national level. Some of these were organized by churches and communities.

(iii) Similarities and differences in norms of childhood social environments. RQ 2a explored the physical activity-related norms of the childhood environments of participants. Both groups of participants described similar physical activity of the children who were part of their childhood social environment. Both groups described children as very active. However, they recalled that for “fun” types of physical activity, boys were more physically active, while girls were busy helping more with domestic activities (compared to the boys).

There were some marked differences between the physical activity norms modeled within the childhood environments of these two groups of women. African-Americans who grew up in walking cities (such as New York) and had to use public transportation also walked a lot. This was not the norm for most African-Americans. On the other hand, walking was a means of transportation—to school, church, shop, visit relatives, and to get to locations for physical activities (such as sports)—was a norm for all Afro-Caribbean participants. Furthermore, for the Afro-Caribbean women, physical activity was a priority for the family and friends of all ages in their childhood environments; everyone modeled a lifestyle full of physical activities. Afro-Caribbean participants grew up with adults who modeled lifestyles that were very active (by virtue of a lot of walking to get from place to place, farming activities, and community sporting activities). With a few exceptions, African-American participants grew up with adults who did not place a high priority on physical activity, and did not model consistent physical activity behaviors. Finally, regardless of the Caribbean country in which Afro-Caribbean participants grew up, they all described very active childhood social environments. For African-Americans, the level of activity in their childhood environments not only varied among the participants, but

participants who moved from one area to another experienced different levels of physical activity being modeled.

Research question 2b explored the physical activity social norms within the current environment of both groups of participants.

(i) *Current environment of African-American women.* For the African-American women, the main theme was that participants identified an apparent disconnect between cognition (knowing about the importance of physical activity) and behavior (actually getting involved in regular activities) for the members of their current social environment. All African-American participants ($n=13$) shared that their current close friends and family know that physical activity is important. However some participants ($n=5$) said they did not necessarily act on that knowledge. Here are some of their comments: “I think that, by mouth, they would all say it is important for everyone. However, I am not sure it is practiced as much” (Amy, African-American, 24 years old); and “I think the general consensus is ‘I know I should do it but I don’t. Okay, we are 30 now, we really should.’ These conversations come up. It’s like we know better, but we need to do better” (Alicia, African-American, 31 years old).

More than half of the African-American women ($n=9$) had a mix of people (active and non-active) in their current social environment. One woman said:

Now [as opposed to, before], they take it seriously. My older sister, her son is now one, and she wants to get rid of the baby weight. My other sister has always been into running and thing. My brothers, I don’t think they think about that. And then my friends, more out of a necessity. A lot of us play sports so it is built-in, but because we are not doing that now, then walking to and from class and for public transportation is what we do. (Aimee, African-American, 22 years old)

Another woman shared similar comments. She said, “My closest family don’t exercise at all, but they feel it is necessary. They think people should [exercise]...For my closest friends, a lot of them exercise. A lot of them are really active, like playing football or running...[A] lot of them run or a lot of them want to be doing that and have said they are going to start” (Alana, African-American, 30 years old).

Yet other African-Americans said that while some of her friends “live and breathe exercise,” current close family and other friends had a different perspective of what comprised physical activity. For instance:

I think they think of it as activities that are not necessarily sweaty. They think exercising is taking a brisk walk slowly [said sarcastically]. When my mom and dad go to the gym and they are on the bike. No sweat. They have the ability to do it but I think it is just, ‘Well, I am at the gym and I am working out.’ And I will say, ‘you know you are not doing anything, right?’ (Amanda, African-American, 33 years old)

Two African-American women indicated that most of the people in their current social environment modeled physical activity behaviors consistently. One said, “Most of them are into exercising. Some get up at 5:30 in the morning and go to the gym. Another family does a lot of physical activity riding bikes and going camping” (Aileen, African-American, 51 years old). She offered an explanation for the difference in current behaviors, compared to those modeled during her childhood environment: “A lot of these people grew up the way I did. I do have a complement of friends who are doing the same things but the ones I hang out with the most hang out as families, play basketball” (Aileen, African-American, 51 years old). She added that their lifestyle was now different from the lifestyles at their parents’ homes.

Summarizing, all African-American participants said that the people within their current social environment perceive physical activity to be important but some said these persons do not necessarily act in ways that are consistent with that perception. Most of the African-American women said they had a mix of active and non-active people in their current social environment. Some of those that do get involved in physical activity do so inconsistently or not with low intensity but others get exercise by going to the gym, running, or playing basketball or football. Only two participants said that most of the people in their current social environment consistently modeled physical activity. Some participants also said that some members of their current environment who are now involved with consistent physical activity behaviors had changed from a more inactive lifestyle.

(ii) Current environment of Afro-Caribbean women. All Afro-Caribbean women ($n=12$) stated that the persons within their current close social circle perceived that physical activity was important, but only half ($n=6$) of these participants said that most members of their current social environment were consistently physically active. All Afro-Caribbean participants said that members of their current social environment think that physical activity is equally important for men, women, and children and that it is perceived as a normal way of life. The Afro-Caribbean women who said most of the persons in their current social environment were consistently physically active described these persons as very active. For one woman, this was especially true of her husband “because he is a physical instructor. He does a lot of walking and does his own workouts.” She also talked about her mother, whose “exercise is good around the house every day” (Cherise, Afro-Caribbean, 33 years old). Another woman also shared about the physical activity level of her husband: “He is always active” (Chantel, Afro-Caribbean, 45 years old). Yet another, talked about her extremely active uncle, who was approximately 80 years old: “He can

run rings around me in terms of fitness. He can do the treadmill for how long. The man is healthy.” Regarding her uncle she said, “I would like to be like him at his age” (Charlene, Afro-Caribbean, 47 years old).

Four Afro-Caribbean participants stated that there were both people who did and others who did not model consistent physical activity behaviors. For example one person said her aunt has always been physically active but her sister, “needs to get motivated” (Catherine, Afro-Caribbean, 32 years old). Two participants indicated that the members of their current environment were not physically active. Participants explained some of the reasons for the physical activity-related behaviors modeled by those involved in less than ideal behaviors. One participant talked about the impact of work: “I think they do think about it but they are constrained by work and stuff like that” (Caitlin, Afro-Caribbean, 38 years old). Another talked about furthering their education: “Not [physically active] right now. Right now, he [husband] is doing a course. He tries to fit in some cricket [Caribbean sport]. He used to do it every Saturday but now it is once a month or once every three months” (Cecile, Afro-Caribbean, 55 years old). Engagement in physical activity also seemed to be associated with social influences. For example, one woman talked about the importance of the social context to motivate each other: “They [my close friends] all joined up as a team to start doing it together” (Caitlin, Afro-Caribbean, 38 years old).

Overall, all participants said the members of their current environment perceived that physical activity is important, and equally so to everyone. Half of the participants described their social environments as ones in which consistent involvement in various types of physical activity—gym, walking, running, manual labor—was the norm. Other participants said that in their current social environment, there were both people who were consistently physically active

and some who were not and a few other participants said that members of their current social environment were not physically active. Motivation from having others exercise together, and time limitations due to work and school were cited by Afro-Caribbean participants as factors that affect consistent involvement in physical activity.

(iii) Similarities and differences in norms of current social environments. RQ 2b explored the physical activity-related norms of participants' current environment. Both groups of women were similar in two respects. Both had members of their current environments who were not involved in sufficient levels of physical activity. This, despite the fact that all participants (of both groups) said the members of their current environments think that physical activity is important.

There were a number of differences between African-American and Afro-Caribbean participants. First, very few African-American participants said most of the persons in their current environment were consistently physically active. Some had members of their current environment who walked out of necessity. On the other hand, half Afro-Caribbean participants reported consistently active friends and family, some of whom were extremely active into their old age. Second, whereas some African-Americans reported that a few people in their current social environment had become more physically active than when they were younger, a few Afro-Caribbean participants reported the opposite; some members of their current environment had become less active than when they were a part of their childhood environment. Third, all Afro-Caribbean women said that everyone in their childhood environment was physically active, but only half of these participants said most people in their current environment was consistently active. Conversely, African-American participants reported that there were more people in their

current environment who are physically active than the number of adults that were active in their childhood environment.

4.2.3 *Body image-related norms*

The third research-question explored the body image-related norms of the childhood and current social environments of (i) African-American women and (ii) Afro-Caribbean immigrant women and (iii) identified how the two groups are similar and different. For RQ 3a, participants were asked about the body image norms of close family and friends in the areas where they grew up. Participants were asked to choose on a Stunkard Diagram (see Appendix D) the body size/shape that the families in which they grew up would consider ideal.

(i) Childhood environment of African-American women. Approximately half ($n=6$) of the African-American women indicated that in the places they grew up, a “medium-built” body type was perceived as ideal, while others ($n=5$) reported that they grew up where slim was preferred. Regional differences seemed to play a role in what was considered the ideal body. One woman who grew up in the North said: “The schools I went to were predominantly Caucasian so a small size to them was a zero; less than, medium was probably one, two, three kind of thing. You are big if you are anything in the higher single digits [dress size]” (Alexis, African-American, 40 years old). Another woman who also grew up in the North said, “In Maryland, they more focused on thin, model build” (Alana, African-American, 30 years old). Some participants from the South made similar comments. For example, one African-American who grew up in Texas, Germany, and New Jersey before moving to Alabama and Georgia said:

It [being bigger] was very unattractive. You would definitely not get any attention. In Texas, it was ok for a male to be these sizes but the males would treat you as if you were not attractive, even if the males were this size. It is almost like a males are supposed to be

big (I don't know if it is because of football) but the females are supposed to be small and dainty. The big guys would have the cutest daintiest girlfriends because they would play sports. It was okay for the guys but they don't want their women to look that way.

(Amber, African-American, 30 years old)

Not only did geography appear to play a role in what was considered an ideal body but familial background also appeared to influence this perception. For example for one participant, although she grew up in the North (New York), where smaller body sizes (figure numbers 2 to 3 on the Stunkard diagram) were ideal, the ideal for her family was bigger (figure numbers 4 to 5 on the Stunkard diagram) for some family members "depending on who you are talking to" (Adriana, African-American; 28 years old). Another participant indicated that although she grew up on the West Coast, where much smaller sizes (figure numbers 1, 2, and 3 on the Stunkard diagram) were considered ideal, the ideal size for her childhood family was "anywhere between #5 and #6." She added that, "[E]ven though my dad and brothers were active, they were bigger (Amanda, African-American, 33 years old). African-American women who grew up in the South consistently chose figure numbers 4 to 6 as the preferred size for their close friends and families.

In discussing the meanings of body size, African-American women used the word "thick" to describe the ideal body type in their family environment. The term "thick" was used mainly, but not solely, by African-Americans who grew up in the South and in the West. "Thick" was used by these women to depict the ideal body in their childhood environments and was described as: "having hips, thighs, butt, and a busty upper area" (Aimee, African-American, 22 years old), "big hip, big thighs, big legs" (Aileen, African-American, 51 years old), and "more of a more proportioned curvier body. Meaning, less stomach, more hips, or boobs or butt" (Alicia, African-American, 31 years old). Thick means that "you are more attractive" (Amy, African-

American, 24 years old). Another woman, who grew up in the West, elaborated further on the meaning of the term “thick”:

[It means] healthy. But, not healthy like physically healthy. It meant that you were attractive. Skinny wasn't in back then. The girls with the skinny legs wanted big legs. They wanted bigger backsides and they wanted to be more curvy. Curvy was really in back then. Dress size 12 back then was good. That was something that people wanted. The women wanted to have a little something and the men wanted something to hold on to. So that is probably why people did not make a big deal of losing weight because they were fine. The men liked the women kind of hefty. In general, in the culture, big legs was a big deal. You were alright. You were kind of made fun of if you were skinny. Now, if you were really obese, sloppy, that is different. People would make fun of you if you were roly-poly, but if you were thick, you were alright. (Aileen, African-American, 51 years old)

Another African-American participant who grew up in the South, and who said thick was most accepted in their childhood environments indicated that, not only would ‘smaller’ be considered, “too skinny,” but ‘bigger’ would be considered, “overweight or sloppy, unattractive, or that she does not care at all about her appearance” (Aimee, African-American, 22 years old).

Although “thick” was deemed ideal by some women who grew up in the West, for other African-American women who grew up in that region, “thin” meant beautiful. One of these women who grew up in the West, said, “California is very health conscious and very image driven.” She said that of all her friends, she, “was the biggest,” and that all her friends “were skinny.” She further explained: “All friends, whether or not they were White were skinny. The smaller you were, you are pretty, you are gorgeous. When I think of being thin, all these positive

themes start flowing. All the pretty colors, Birds. . . .if you are thin, it doesn't matter what your face looks like, your body says you're beautiful" (Amanda, African-American, 33 years old).

Responses from the women in this study suggest that not only do geographic region and family play a role in body ideals but these factors also influence the meanings associated with the concept of "thin." Amber, who was quoted earlier, explained that when she lived in Texas, smaller bodies were more attractive than larger bodies for women. She said that before she was nine years old, "it was very important to be thin in the places that I lived. It almost was a big symbol of beauty and being healthy." Then she drew a strong contrast between this earlier perception of body size and those she learnt later. She said that it was not until she moved down South that it was, "more attractive to have more weight on you but there is that fine line between having healthy weight and being overweight. It was way more acceptable to have that healthy weight than to be skinny when I was in middle school (in Alabama) and high school (in Atlanta)." Additionally, she said that, "skinny girls would get teased and the girls that were more curvy got more attention." Amber finally concluded that, "A bigger body [was] more acceptable in the South." (Amber, African-American, 30 years old)

Overall, there was a wide range of body ideals and meanings in relation to size among the African-American participants. The disparity seemed to be related to geographic region and familial background, with some women exposed to different norms at various times in their lives. In general, African-American participants who grew up in the North and coastal regions reported that smaller sizes (figure numbers 1 to 3 on the Stunkard diagram) were the norms among their friends and within their general childhood social environment. However, some of these women also reported that larger sizes (figure numbers 4 to 6 on the Stunkard diagram) were the norms among family members within their childhood social environment. Women from the South

reported that larger sizes (figure numbers 4 to 6) were the norm among the family and friends from their childhood environment. In general, women from the South and some from the West said that thick bodies (those that are busty with big hips and thighs) that are proportioned and with flat stomachs were considered attractive; they also said that thin was attractive. Other women from the West (coastal areas) and those from the North, said that regardless of race, thin was more beautiful in their childhood social environment.

(ii) *Childhood environment of Afro-Caribbean women.* In response to the question about body image norms, most ($n=10$) of the Afro-Caribbean women who participated in the study said that in their childhood environments, smaller to medium sized shapely bodies were more highly regarded than bigger bodies. Smaller to medium body types were represented by figure numbers 2 to 4 on the Stunkard diagram. A few Afro-Caribbean women indicated that men might prefer a little more weight on the women so although they (the women) may want to be a body type represented by Stunkard diagram number 2, they would try to be a little heavier to please the men. One of those women expressed it this way: “[W]omen prefer to be smaller—diagram number 2 or 3—but men prefer more meat on the bones—diagram number 3 or 4. Because of that, some women would prefer more meat to satisfy men” (Carmen, Afro-Caribbean woman, 32 years old). They also indicated that the men preferred additional weight in specific places:

Men generally liked women that had a lot of weight on them in specific places. Weight was considered something healthy, but not too much. Not too much, not too little. When I was growing up, people in general would choose diagram number 4, and my family would be a tossup between number 3 and number 4. (Catherine, Afro-Caribbean, 32 years old)

In discussing the meaning of body size in their childhood social environment, Afro-Caribbean women talked about what comprised a healthy body. In general, they indicated that smaller was healthier but warned against being too slim. They said: “Flat tummies [were considered healthy]” (Charlene, Afro-Caribbean, 47 years old); “Once you got too much on the fat side, they would perceive you as not healthy” (Caitlin, Afro-Caribbean, 38 years old); “in general smaller women would be healthier ... they would perceive slim and healthy as fine” (Caitlin, Afro-Caribbean, 38 years old); “If you were too skinny, they would say you are malnourished and if you looked too big, they would say you are fat” (Chantel, Afro-Caribbean, 45 years old).

Others warned against being too fat. They talked about health and social implications. One participant said that the people in her childhood environment perceived that there was not only health but social implications related to body size. She said, “In Jamaica, ... when you are fat, it is another thing; they say you are too fat, you are going to get high blood pressure, or you are going to die from a heart attack. So, you have to be not too fat, not too skinny” (Cecile, Afro-Caribbean, 55 years old). Cecile also elaborated on the general attitude within her childhood environment toward girls who did not fit into the expected norm. She said, “Girls who were fat would cry a lot because you would be teased and called ‘fatty boom boom’ and if you were too skinny, you would be called meager” (Cecile, Afro-Caribbean, 55 years old).

In discussing the meanings associated with body size in their childhood social environment, Afro-Caribbean women not only said that slim was healthy, and more socially acceptable, but they also said that slim was attractive. Here is what some of these participants said: “The smaller they would say is more attractive” (Carla, Afro-Caribbean, 33 years old); “the Coca-Cola shape was considered good looking or sexy or appealing (Chantel, Afro-Caribbean,

45 years old); and “Slim was attractive and bigger was not” (Casey, Afro-Caribbean, 25 years old).

Two Afro-Caribbean participants also added that bigger meant attractive, but only if correctly proportioned: “If you are fat that would say ‘you nyam [eat] too much, you are greedy.’ If you were very small, you either did not eat a lot or you are small bodied, or too skinny but it wasn’t a thing where, as in when you are fat, people would tease you... if the woman was attractive looking and fat, not obese fat but fat, and she walked with a little waddle and if her breast to hip size proportions were ok, she was attractive to the male.” (Chantel, Afro-Caribbean, 45 years old).

In summary, most Afro-Caribbean participants indicated that smaller to medium sized bodies were considered ideal bodies in their childhood social environment. Two women indicated, however, that correctly proportioned bigger bodies may be ideal for some men. Some women also said that men preferred women whose bodies had a little more “meat” providing that they had flat tummies; they also said that some women would accede to this preference of a little additional weight. Overall, Afro-Caribbean women said that although slim was perceived as meaning healthy, attractive, and socially acceptable, being too slim or too heavy were perceived as unhealthy by people in their childhood social environments.

(iii) Similarities and differences in norms of childhood social environments. There were more differences than similarities between the body image-related norms described by African-Americans and those described by Afro-Caribbean participants. The first difference was that more African-Americans reported that they grew up in areas where larger body sizes were more highly approved than smaller sizes. On the other hand, for the Afro-Caribbean women, almost all

participants reported that they grew up in environments where smaller to medium body sizes were considered ideal.

The second difference is that there was less variance in what was reported as ideal body size within the childhood environments of Afro-Caribbean participants; ideal body sizes ranged from 2 to 4 on the Stunkard diagram. African-American participants reported ideal body sizes that ranged from 2 to 6 on the Stunkard diagrams for their childhood environments.

The geographic areas in which African-American participants grew up and the cultural background of their close friends and family played a role in their body image perceptions. There seemed to be a difference in perceptions about what constituted “small” versus “medium” depending on participants’ environment. For some, what was small for them and their families was medium for others within their wider communities (e.g. at school). For a few African-Americans who grew up in the South, smaller was attractive within their childhood environment. More generally, however, African-American participants who grew up in the South or who had parents from the South reported a preference for bigger bodies as ideal.

The third difference between African-Americans and Afro-Caribbean participants related to the meaning of body size. There was a wider range regarding what was considered attractive within the childhood environments of African-Americans. For some African-Americans, smaller body sizes were deemed as too skinny, for some who grew up in the West and South, thick was attractive, and for yet others, smaller was attractive, and for some, larger was attractive. Most Afro-Caribbean participants, on the other hand, reported on body size meanings in terms of the implications for health. Other Afro-Caribbean participants reported that small to medium body sizes were considered to be attractive, whereas, larger sizes were unattractive and unhealthy.

The two groups were similar in that they both stated that some of the men in their childhood environment preferred bodies which “gave them something to hold” and participants from both groups commented about the importance of flat abdomens. In addition women in both groups reported that shapely bodies were deemed attractive in their childhood environment and that women were desirous of pleasing the men by maintaining body shapes that men found attractive.

Research question 3b explored the body image-related norms of participants’ current social environments. To gauge this, participants were asked to indicate which of the Stunkard diagrams represented the body size their closest current friends and family would choose as ideal for the participant. They were also asked to say what they thought the attitudes of their current close friends and family would be regarding the Stunkard figures that were smaller and larger than the ones they would choose as ideal.

(i) Current social environment of African-American women. Most ($n=8$) African-American participants stated that the members of their current social environment would choose between figures numbered 3 and 4 on the Stunkard diagrams as the ideal figure for them (the participants). The reported ideals were not always indicative of participants’ actual current size. For example, Abigail said that her husband would say, “Probably three sizes less than I wear now, so diagram number 3. My daughter would say the same” (Abigail, African-American, 50-65 years old). On the other hand, Adriana reported different ideals among her current social environment. She said, “[My boyfriend] thinks I am a perfect size. ... He would say number 3 is perfect. But, she added that, “Maybe some friends would say I am too small. They keep saying ‘you are so small,’ so it does bother me sometimes. Even though he says ‘you’re fine,’ it is still stuck in my head. It was also in my head before I met him. ... My girlfriends would say number

4” (Adriana, African-American, 28 years old). This group of participants (who said members of their current social environment would choose between figures 3 or 4) included one person who said that her friends would choose between figures 2 and 4, but added that her husband’s choice would be somewhere between figures numbered 3 to 4. All of the other participants who said their families and friends would choose between figures 3 and 4 explained that their family and friends would consider figure numbers 1 and 2 thin or “too skinny” (Aileen, African-American, 51 years old), or “anorexic, unless that was their natural bone structure” (Adalyn, African-American, 39 years old). One person who said her friends and family would choose diagram number 4, said that up to figure number 6 would be okay. All others indicated that anything bigger than a figure number 4 was too big but one woman, Aileen, said, “They [her family and friends] would assume that they [anyone larger than figure number 4] have health problems and say they need to lose weight.”

The other African-American participants ($n=5$) said the members of their current social environment would say that the ideal body is between Stunkard figure number 4 to number 7. Three of these African-American participants indicated that some members of their social environment may go as low as 4, but all said that members of their current social environments would consider figures numbered below 4 too skinny. Alana was one of these women. She also indicated that her family and friends would be concerned about larger sizes. She noted that these persons who were concerned about sizes larger than those represented by Stunkard diagram number 4 would say, “They would say they are probably unhealthy.” She also noted the difference in the geographic region in which these persons live. She said, “Those family members are not from here. They are from up north. Actually from New York, so they have the same mentality as Maryland” (Alana, African-American, 30 years old).

Some family members had a variety of people in their current social environment.

Amanda, for example, commented on the differences among some of her other friends: “[My friends] are not necessarily numbers driven.” She thought that “[Stunkard figures] between 4 and 5 [would be the ideal] for my friends in Detroit.” However, she stipulated that, “[t]hey would like the thighs on number 5, but with small mid-section”. Amanda also differentiated between the men and women in her life: “[The] difference between them is the guys in my life would say 6 down are attractive. The women in my life would probably say 4 down.” She added that the women in her life would think that figures above number 4 were okay but they would be concerned about anything above figure number 7.” However, she added that, “My friends who are in this larger range are probably my most confident friends,” and that she has a friend who is “probably an 11” (Amanda, African-American, 33 years old). Some of the women in the group who indicated that their current family and friends would choose larger sizes said Stunkard figure number 7 represented a body that was too large, but everyone agreed that figure numbers 8 and 9 were too big.

In summary, African-American participants typically stated that members of their current social environment would choose between Stunkard figures 3 and 4. There was a wide range of what was considered the ideal body—Stunkard figures 2 to 7. The ideals reported by participants did not necessarily represent participants’ current body type. Various participants indicated that the choices of friends and family were, smaller, the same as, or larger than their current body type. In general, African-American participants said that members of their current environment would say that figures 1 and 2 represented people who were too skinny or anorexic and that larger sizes (for some, from figure 5 and upward, and for others, from figure 6 and upward) were unhealthy or unattractive.

(ii) *Current social environment of Afro-Caribbean women.* Most ($n=11$) of the Afro-Caribbean participants shared that the members of their current social environments would choose Stunkard figures 2 or 4 as ideal body sizes. Their comments included Caitlin's: "My husband would say ...[figure] 4. My sister thinks ...[figure] 3 is good" (Caitlin, Afro-Caribbean, 38 years old). Cecile, who also said her husband would choose figure number 4 as ideal, said, "My husband does not want me to put on any weight. If I put on weight he would comment." She said that her friends would also choose diagram number 3, "But I have one or two friends who would like 4 or 5" (Cecile, Afro-Caribbean, 55 years old). Of these participants (who said their friends and family would choose figures 2 to 4) a few, such as Casey said figure number 2 would be fine, but, "number 1 looks anorexic ... numbers 4 and 5, solid ...but [numbers] 6 to 9 are fat ...unhealthy" (Casey, Afro-Caribbean, 25 years old). All other participants who said their family and friends would choose figures 3 to 4 indicated that bodies represented by figure numbers 1 and 2 would be too skinny. Except for one participant, all others said that their family and friends would consider anything above figure number 4 to be too large. Catherine and Cherise were among those persons. Catherine, who indicated that, her friends would consider figure number two as representative of a model said, "[Figure] number 5 would be pushing it. [Number] 6 and above, no. Not healthy! They would say, 'you are getting round.' You would need to do something about it" (Catherine, Afro-Caribbean, 32 years old). Cherise said, "[He does not like figures] 5, 6, 7, 8 or 9. Mother would say [figure] 3 is fine. ... She would be fine with [figure] 4. ... She would say 'that's too much fat,' for [figures] 5, 6, and 7" (Cherise, Afro-Caribbean, 33 years old).

Of the remaining three Afro-Caribbean women, one said the choice for ideal body would be figure number 2 for her family and friends: "He would say choose [figure] 2. ... grandmother

... [figure] 2 ... mother, [figure] number 2, also.” She added that, “[My] husband would say [figures] 3 and 4 are overweight,” her mother would say that number 4 is “too fat and the others grossly too fat” (Carla, Afro-Caribbean, 33 years old). The other two people said that some members of their current environments would go as high as figure number 5. One of these women was Charlene, who said the ideal would be, “[Figure] number 5. My brother’s wife is a plus size woman” (Charlene, Afro-Caribbean, 47 years old).

Overall, Afro-Caribbean participants indicated that members of their current social environment would choose among figure numbers 2 and 4 as the ideal body, one person said her family and friends would choose figure number 2, and two others indicated that they had a few friends or family members who would choose figures 4 or 5. Most persons indicated that figures above number 4 were too large for members of their current social environment. Most Afro-Caribbeans said their friends and family would say that figure number 1 looks anorexic or too skinny. Some said number 2 are too skinny but one person indicated that this figure would be perceived as representative of a model. Participants indicated that figures above figure number 4, that is, number 5 and upward would be perceived by their current friends and family as unhealthy.

(iii) Similarities and differences in norms of current social environments. African-American and Afro-Caribbean participants were similar in three ways. Both groups had women who said the bodies represented by Stunkard diagram numbers 1 and 2 would be considered by people within their current social environments to be too skinny or unhealthy (e.g., anorexic). Another similarity is that most women in both groups said diagram numbers 7 to 9 represented bodies that would be evaluated as too large within their current environments.

The two groups of participants differed in a number of ways. African-American participants indicated a wider range of body ideals (as measured by the Stunkard figures chosen) as a group and reported more variety in the reported ideals among members within their current social environments. Additionally, most of them said figures 3 or 4 would be chosen as ideal. On the other hand, most Afro-Caribbean participants reported that almost all members of each person's current environment held similar ideals in terms of body size (represented by Stunkard figure numbers 2 and 4). Additionally, African-American participants reported more flexibility among the members within their current environment than did Afro-Caribbean participants. In other words, the African-Americans reported their family and friends to be more accepting of diagrams that represented sizes above the stated ideals. On the other hand, Afro-Caribbean participants were more emphatic about resistance to sizes above the stated ideals.

Furthermore, whereas some African-Americans reported that diagram number 3 represented a body that was too skinny for some members of their current environment, no Afro-Caribbean reported that diagram as being below the accepted ideals. A larger number of Afro-Caribbean participants said that anything above diagram number 4 would be too large for members of their current environment. Finally, one Afro-Caribbean woman, but no African-Americans, stated that figure numbers 3 and 4 would be considered as too fat by members of their current environment.

4.3 Role of the social environment in obesity-related behaviors and attitudes

The second set of research questions—RQs 4, 5, and 6—compared participants' obesity-related behaviors with those of members of their social environments. In this regard, similarities and differences between African-American women and Afro-Caribbean women were examined. To get at this question, each participant's attitudes and behaviors—i.e., diet, physical activity,

body size—as described by her, were compared to her descriptions of both her childhood social environment—the environment in which she grew up—and her current social environment.

4.3.1 *Role of social environment on food-related behaviors*

Research Question 4 explored the roles of the childhood and current social environments in the current food-related behaviors of (i) African-American women and (ii) Afro-Caribbean immigrant women, and (iii) examined how the two groups are similar and different.

(i) African-American women's behavior and role of their social environments. The majority ($n=8$) of the African-American women indicated that they had not been incorporating food habits from their childhood food environments in their own current food-related behaviors. They gave various explanations. Some of these participants were concerned about their health. One woman had reduced her consumption of fried food “because I do have high cholesterol” (Alison, African-American, 43 years old). Another African-American woman indicated that her current food-related lifestyle was “unique,” in terms of both “the kinds of food and cooking methods” modeled in her childhood environment. She, too, explained that health challenges had prompted her to change her diet. “[I] had to have gall bladder removed. ... [because of] fried foods. I was not eating red meat or pork, I was eating fried shrimp. So how you prepare your food is important as well, so, that caught up with me” (Ada, African-American, 51 years old). Ada also added that here current food choices were healthier than those modeled by the people in her current social environment.

For another African-American woman, her current food habits are more like those modeled within her current social environment now that she has been exposed to healthier lifestyles. She described some of the norms among her current friends as “always grazing,” “juicing,” and “lots of water.” She explained that, “[w]hen I go back home to visit Ohio and my

mom still cooks the same way, I can't eat that. I say, 'mom, I'm sorry.' I can't eat the smothered pork chops." She shared that her mother still fries "pork chops in whatever oil (she thinks that if she uses olive oil it makes it healthy and I am like, 'well if you fry the olive oil, it really isn't healthy anymore.'" She added that not only does her mother fry the pork chops but, she will "take that out and add some flour in the pan and a little water or chicken and make up a nice gravy." In addition her dad "won't eat healthy. He likes everything fried. Bacon, sausage and everything is fried." She confessed that although she loves bacon, she "will have bacon once or twice a year now," and that she has almost completely cut out all fast food," but she, "used to do the McDonalds, Wendy's, and all of them." She said that the primary reasons for the change in her diet related not only to health concerns, but also to her age. She said that she is now "fifty-one [years old] ... I see so many people who are my age and older who look fabulous. ... If I can help it, I don't want to have somebody wheeling me around if I live long enough to 70 or 80 or 90." She also shared that she thinks she has a responsibility: "I really need to take more responsibility for my health and being a better steward [of her health]" (Aileen, African-American, 51 years old).

Whereas those African-Americans just discussed had deviated substantially from the behaviors modeled in their childhood environments, other African-American women who said they have retained behaviors modeled in their childhood environment added that they had made some adjustments, either in terms of the types of food or in the preparation methods. For example, some women reported using the same cooking methods modeled in their childhood environment, but cutting out some foods: "I eat the same way I was raised except for the red meat and pork" (Alexis, African-American, 40 years old). Another African-American woman said she is faced with choosing between opposing behaviors modeled in her childhood

environments. Amanda, who grew up in a predominantly White neighborhood, talked about her attempts to incorporate less of the behaviors modeled by her family and the challenges of incorporating the healthier food-related behaviors modeled by White people in the social environment in which she grew up. She said that although she, “[D]id not grow up being health-conscious in my family’s world” her current diet has been more like that modeled in the White neighborhood in which she grew up. Her diet consists of “vegetables, a lot of fish, pasta, and salad, when I cook.” She said she has tried to be more health conscious “Now that I have gotten older ... I have to watch out for all these things ... the sugar ... I am conscious about it. I try to use alternatives in my cooking.” However, she shared that she struggles with her food decisions and that when she goes out she “will get like a veggie burger, like a Black-bean burger ... any type of fish” but also “fries, [and] some type of pasta dish” Despite her attempts to change some of her eating habits, she concluded that because of this inconsistency she perceived herself as “not committed” (Amanda, African-American, 33 years old).

Not all African-American women who changed their diets changed for the better. Adalyn, whose food-related behaviors were also more similar to those modeled in her current social environment, grew up on the West Coast, where, as she said, “people were very conscious about what they ate.” Now, her eating habits are, “Not as good, meaning, now, I do eat French fries and I even remember that growing up, I would try not to eat cheese because I heard it was fattening and now I eat cheese ... definitely gotten so much more lax on my diet.” Adalyn, whose husband will eat anything, “no matter how greasy,” also said that, “I would say once I got pregnant I gained weight and so I was not as conscientious. So, maybe in the last eleven years I probably started getting lax” (Adalyn, African-American, 39 years old). Two other African-American participants described current food-related behaviors that were more similar to those of their

current social environment. One of these women said she eats and drinks the same things as her current close friends said, “I have a group of girlfriends that I travel with a lot who like to have adult beverages. ... [I]t seems like we predominantly end up at Mexican or Cuban type places (Alison, African-American, 43 years old).

Some African-American participants said that they had retained the food-related behaviors modeled in their childhood. One participant indicated that her current food choices were directly related to healthy changes that the family made during her childhood. She explained that, because of health reasons, her family had already made some healthy changes when she was a child. She has continued to practice those behaviors:

I still don't eat a lot of Soul food just because I did not grow up on it. I still don't eat beef, don't eat pork, and I still eat a lot of seafood, and chicken, and turkey, mostly baked. I don't fry anything. When I was about fourteen, my mother ended up getting colon cancer and so we had to change our eating habits. We could no longer eat fried foods and beef and different things like that and so we did not have it in the house.

(Amber, African-American, 18-32 age group)

She shared that because of the change, now, she “love[s] vegetables. My sister and I grew up eating a lot of salads. We would eat raw vegetables, to the point where we used to ask for vegetables, maybe because it was introduced to us at such an early age.” She said, that for her family, eating raw vegetables, “was just the norm” (Amber, African-American, 30 years old).

Other African-American women who retained the food-related behaviors modeled during their childhood attributed this to the influence of their mothers. For example, Abigail said, “She [mother] felt like she cooked like her mother” (Abigail, African-American, 50-65 years old); and “My mom always had me in the kitchen. She passed down recipes from past generations.

Usually, we had chicken, macaroni, and cheese – the usual Soul food thing- rice and peas, potatoes, Spanish dishes like pastelles and things like that” (Adriana, African-American, 28 years old). Another African-American woman stated it this way:

I look up to my mom as the best baker I know. Now that that I am older, we can bond at another level because I can call her and share recipes with her. We talk about food and different ingredients. It is like a different language when my mom and I ... talk about food, and different ingredients and different ways... She will call...like she called me this morning at 4:00 AM, my time, and she was like, “I went to this event and they had this sweet potato salad.” We will talk about Thanksgiving for weeks. Food is really huge!
(Amanda, African-American, 33 years old)

Amy is another African-American woman whose current food-related habits are influenced by her mother. She said that she sometimes eats as she did during her childhood when she is home since she lives with her mother. However, she mostly prepares her own food. When she does, she tries to make healthy choices which may include, “rice or starch, some sort of vegetable component, and fish or wings or something,” but her choices are mainly based on convenience so she will eat, “stuff I can warm up quickly like hot pockets or turkey burgers. I like little halos or the cuties. The halos are like clementines that are seedless. I carry a lot of those around or apples and the chewy nature valley bars” (Amy, African-American, 24 years old).

Three of the African-American participants who reported that their current food-related behaviors incorporated those modeled in their childhood also said they were influenced by behaviors modeled by persons in their current social environments. For example, one of these participants explained that the food preparation methods she used were the same as those where

she grew up. She said “I definitely cook chicken and turkey and things like that using the same process...[However] now that I am older, we have steered away from the red meat.” In referring to her close current friends, she shared that, “They influence me when I am around them so if I go out to eat with my friend, I know I am going to want to choose something healthy. Same with my sister, but it is kind of hard to keep it up on my own” (Aimee, African-American, 18-32 age group).

In summary, the majority of African-Americans did not incorporate food-related norms modeled during their childhood. Most African-American participants try to make healthier choices now because of health reasons, because they feel they need to make better choices as they get older, or because they are influenced by healthier behaviors within their current environment. While some African-American participants said they have continued the healthy or unhealthy food-related habits modeled during their childhood, others said they have retained some of the childhood behaviors but have modified either some of the food types or cooking methods they now choose. Other African-Americans said they make healthier choices than those within their current social environment, while yet others are now more lax and, influenced by their current social environment, make less healthy choices compared to the norms of their childhood environments. One participant also spoke about her challenges in choosing between opposing behaviors modeled during her childhood.

(ii) Afro-Caribbean women’s behavior and role of their social environments. None of the Afro-Caribbean women indicated that her current food behaviors were consistent only with those of her current social environment. More than half ($n=7$) of all the Afro-Caribbean women reported their current food-related behaviors were consistent with both those modeled by their childhood and current social environments. For these women, the behaviors modeled by close

family and friends during childhood and the current close family and friends were similar. Some of these Afro-Caribbean participants, for example, Carla and Carolyn, shared that, for each of them, her mother is still a part of her current environment. Each of these participants lives with her mother here in Atlanta. For Carla, her mother's favorite foods are fish prepared with "okras and crackers" Caribbean style (Carla, Afro-Caribbean, 33 years old). For Carolyn, her mother does the cooking, which is usually Caribbean style, and includes her mother's favorite, "oxtail and rice and beans." She also shared that her brother likes "curry chicken" prepared the way they did it while she was growing up. Additionally, Carolyn's family drinks a lot of water because they "used to drink a lot of water back home" (Carolyn, Afro-Caribbean, 20 years old).

In general, the current eating behaviors of Afro-Caribbean women stemmed from the value they place on the quality of foods and preparation methods modeled in their childhood. Their commitment to continue these behaviors was further fueled by their reservations about some of the food that is available in the U.S. They shared that even though their eating habits here in Atlanta have been similar to back home, they are skeptical about some foods they buy here in Atlanta; they do not trust that what they find here is healthy or organic. One woman said, "[Eating habits are] almost exactly the way we were when I was growing up because I have to have my seasoning ... scallion ... onion and everything. I rarely use any powdered seasoning. She uses the same cooking methods: "I don't really fry chicken. It is predominantly brown stewed or curried or occasionally baked. However, she was more confident about the food sources from her childhood than those available to her now:

It was really even better when we were growing up because we didn't have to go out and buy fruits per se. I grew up like a tomboy. Climbed any tree. Picked anything I wanted and I know where it is coming from. Here, I have to be selective because even the ones

that say they are organic, I'm not really sure that they are organic. For me, I believe that I was even eating healthier when I was back home, because I know the foods were organic.

(Catherine, Afro-Caribbean, 32 years old)

Other Afro-Caribbean women, despite the desire to continue the food-related behaviors modeled in their childhood, found that they could not easily continue cooking everything in the same way they did “back home.” A few of these women expressed concern that they could not find all the food items they sought; for some of the items they did find even though they used Caribbean cooking methods and seasoning, the food (especially the meats—chicken, fish, etc.) still did not taste like it did back in the Caribbean. This is what one woman said:

I mix it because I can't find everything here in the U.S. So, half/half, 50/50. I find myself doing American style because when I try doing the Kitian [St. Kitts] way it does not come out the way you want. For example, the type of fish you get here, trying to cook it the Kititian way, it does not taste the same, although you use the same ingredients.

(Cherise, Afro-Caribbean, 33 years old)

Because of the undesirable difference in taste, she tries to find other preparation methods that will yield a more tasty meal. She added, “I have been trying to find a way to cook it. Maybe it was because of the type of fish. Maybe it wasn't raised in the sea, maybe it is pond-raised. I have been experimenting” (Cherise, Afro-Caribbean, 33 years old).

Some Afro-Caribbean women whose current food-related behaviors are consistent with those modeled both in their childhood and current social environments, found ways to overcome food availability challenges in the U.S. These women prepare their own meals. One woman said that, currently, she uses products “both from here and products from home.” However, she uses mostly “Jamaican products.” She explained that when she just came here to the U.S., “it was a

little hard to get our products to use but as time went on, we were able to find the types of foods that we are using now.” She has, also, since then, found sources from which she is able to “get them at the same rate that we would get them back home.” Some examples of these foods are “bananas, yams, coco, cassavas, sweet potatoes, and plantains ... salt fish ... some of our tinned [canned] products ... sardines ... tinned mackerels and corned beef ... cho-chos and pumpkins and cock noodle soup” (Carla, Afro-Caribbean, 33 years old). Another Afro-Caribbean woman shared that she gets most of her food from the Caribbean Market and the Farmers Market. She currently eats “fish, curried goat, and lamb.” She also avoids “fast foods,” and finds that “eating out here, the food is salty. ... The people put too much salt in their food” (Charlene, Afro-Caribbean, 47 years old).

Few ($n=4$) of the Afro-Caribbean participants indicated that their current food-related behaviors more closely resembled those modeled during their childhood than their current social environment which they view as less healthy. One participant stated that she still eats “chicken and vegetables and ground provisions. Same kinds of foods. ... Rice and peas or rice and pumpkin. Chicken is baked or stewed. And vegetables and fruits – pineapples, ripe bananas and so on” (Cecile, Afro-Caribbean, 55 years old). Another, Charmaine, said she eats, ‘less fatty foods [than what she sees served here in the U.S.] That is why I stick to my Jamaican food. Since I have been here, I never had a burger. I think it was just once that I ate a pizza. ... I stick to my Jamaican foods, not these fatty foods’ (Charmaine, Afro-Caribbean, 30 years old).

Most Afro-Caribbean participants perceived Caribbean food-related norms as healthier than American food norms, but one participant in particular formed that opinion after she lived out the experience of adapting American food norms. She is currently practicing food-related habits modeled during their childhood, but she deviated from those behaviors when she initially

immigrated to the U.S. Camille said she has now reverted to eating more like she did in the Caribbean, but indicated that her food-related behaviors were different when she just came to live here. She said, “I try to do my best, but initially I wasn’t doing that.” Initially, there was a fast food lure: “I came up here and saw McDonald’s and Burger Kings and I went straight into that.” She “started cooking since ... [she became] pregnant.” Now, she tries to “have a balanced meal. I have rice and a salad, and beans, and spinach and then the meat. I don’t fry meat; I bake or broil meat.” She also shared that because of the fast-food lure, she “gained 10 pounds over five years, initially. (Camille, Afro-Caribbean, 23 years old)

Some Afro-Caribbean participants also explained that they currently practice food-related norms from their childhood because of the influence of their mother. Comments regarding the matrilineal influence of food included those from Cherise, who said she prepares the same types of meals she grew up on. She said, “My mom, chicken soup. She loves chicken soup. She said she grew up on soup. She grew us up on soup, also. Soup was twice or once a week – chicken, bean, goat water.” (Cherise, Afro-Caribbean, 33 years old).

There was one Afro-Caribbean woman who said her current food-related behavior is not consistent with either those modeled in her childhood or current social environments. She explained that her current habits are attributed to always being busy and just grabbing something out of convenience, depending on where she was and what has happening at the time. She has lived in the U.S. for six years. She explained that the sister that she lives with cooks healthy Caribbean food, which she eats sometimes but that her main challenge was time, “because everything is fast. My life over there, everything was slower paced. Here, everything is fast and I don’t have time to prepare breakfast and I probably get up just in time to get out.” She shared that, if she does have breakfast, “it is fast food, getting a quick Chick-Fil-A sandwich, or it is

gonna be, maybe a banana or some yogurt, just for the stomach.” When asked whether she ate a lot of fast food, she said, “I do. It is unfortunate but I am working on that.” Despite her current behavior, she shared that, “I think fast food is an addiction actually. It brings comfort. I am not a cook. If I could cook, then yes [I could incorporate Caribbean food]. But, no” (Casey, Afro-Caribbean; 18-32 age group).

Overall, the current food-related behaviors of more than half of the Afro-Caribbean participants were consistent with the norms of both their childhood and current social environments, which were very similar and were comprised of some of the same people. Reasons for continuing these behaviors included their evaluation of Caribbean food and food preparation methods as healthy, reservations regarding the quality and health value of American food, and the influence of their mothers’ food-related attitudes and behaviors. Many Afro-Caribbean participants have found ways to overcome challenges associated with the taste of some American food and availability of foods with which they are familiar. Other Afro-Caribbean participants retained behaviors that were consistent with those of their childhood environment, but refrained from adopting behavioral norms of their current social environment because they perceived those behaviors (the norms within their current environment) as unhealthy or, as was the case for one participant, had previously experienced the negative effects of consuming fast food and similar American foods on a regular basis. One Afro-Caribbean participant practiced unhealthy behaviors due to time constraints and the convenience of fast foods as an alternative; her behaviors were similar to neither those in her current nor childhood social environments.

(iii) Similarities and differences between the two groups. The majority of the Afro-Caribbean women reported practicing similar food-related behaviors to those modeled by people in their childhood social environment, while fewer than half of the African-American women

reported the same. This difference is not surprising because, whereas the Afro-Caribbean women spoke of their childhood food environment in positive terms, in general, the African-American women did not. The Afro-Caribbean women who modeled the behaviors seen in both their childhood and current social environments had similar role models in both environments, whereas the African-American women who indicated they were more likely to model their current social environments behavior indicated a difference in the food behaviors of the two social environments. African-American participants cited age and health concerns as reasons for adopting some of the healthier behaviors of their current social environment, while a few African-Americans stated that members of their current environment influenced them to become more lax about their food-related behaviors.

African-Americans are more accustomed to cultural differences in the food items and preparation methods available in their current social environments. Afro-Caribbean participants, though, have had to overcome food-availability, and food perception challenges and adjusting to the difference in the taste of food purchased in the United States. Their comments indicated concerns about whether food was organic and wholesome and having to source familiar foods from specialty shops. Overall, Afro-Caribbeans reported more effort in procuring food items.

Both groups included one participant whose current food-related behaviors were influenced by neither her current nor her childhood social environment. The African-American, who had adopted behaviors that were healthier than those modeled in her childhood and current environments, said she needed to make the change because of serious health issues. The Afro-Caribbean, on the other hand, had adopted behaviors that were not as healthy as those modeled in childhood and current environments. She explained that time constraints and the convenience of readily available fast-foods (such as Chick-fil-A) were the reasons for her current choices.

Health-related concerns influenced the current food-related behaviors of both the African-American and Afro-Caribbean participants. But, whereas one African-American continued the healthy habits modeled during her childhood, other African-Americans, who said they were currently eating a health-conscious diet, had changed behaviors from those that represented the norms of their childhood social environments. Additionally, for Afro-Caribbean women, rather than change their food-related habits to eat healthy, they strove to maintain the food-related norms of their childhood.

Finally, although not specifically asked about, both Afro-Caribbean and African-American women mentioned the matrilineal influence of food choices in their families and their mother's influence on their own food choices. The women described diets that were heavily influenced by the cultural norms, preferences, and upbringing of the mothers in their lineages.

4.3.2 Role of social environment in physical activity-related behaviors

Research question 5 explored the roles of the childhood and current social environments in the current physical activity-related behaviors of (i) African-American women and (ii) Afro-Caribbean immigrant women and (iii) sought to identify how the two groups are similar and different.

(i) *African-American women's behavior and role of their social environments.* Although children were reported as being active in social environments in which all African-American participants were raised, only approximately half of the participants ($n=6$) said they continued to be physically active when they, themselves, became adults. In general, African-American participants reported that very few adults in their childhood social environment modeled consistent, if any, physical activity behaviors.

Overall, African-American participants tended to model the behaviors (including no physical activity, some physical activity, and a lot of physical activity) of the adults they observed in their social environments as they were growing up. For example, one African-American woman, Adalyn, who reported that she was currently living a favorable physical activity lifestyle, grew up with her mother, whom she said, “wanted to lose a little weight. She wanted to look good. She was always very proud that she is strong. She feels like she can lift a lot of weight.” Adalyn reported a childhood environment in which her father and mother modeled consistent physical activity norms. She said she grew up seeing physical activity, but has a mixture of healthy and unhealthy behaviors modeled in her current social environment. Her current lifestyle consists of “exercise about four times a week for 30 minutes on the elliptical.” She also has “a gym membership, which is about ten minutes away,” where she “will probably exercise between a class and the treadmill or something for maybe about an hour and a half” (Adalyn, African-American, 39 years old).

Others, for whom less physically active lifestyles were modeled among adults, were less active adults. Their responses to the question about their level of current physical activity included those from Abigail, Ada, and Amy. Abigail, who said that besides seeing people going to work, she saw no physical activity modeled among those in her childhood social environment. She said her current level of physical activity is “[z]ero activity” (Abigail, African-American, 50-65 years old). Ada, who grew up in a social environment where the children and youth walked around a lot also reported that the people in her current environment are not very active, said, “I am in the, ‘if we can do this two days a week, that is a good thing for me [mode]’” (Ada, African-American, 51 years old). Amy grew up seeing people walking to get from place to place, but not necessarily for exercise and although members of her current social environment say

physical activity is important, their behaviors are not consistent with this position. Amy said she recognizes the importance of exercising and tries, but is not consistent. Although she is concerned about her safety she, “tries it [running] a couple of times a week. One week I will do it three times and the next week I may not do it” (Amy, African-American, 24 years old)

A few African-American participants who reported healthy physical activity norms in both childhood and current social environments said that their current physical activity behaviors were not healthy. For example, Adriana said she grew up in a walking city and within her current social environment, her boyfriend, “likes to go to his gym daily.” She also said that, “[a] lot of my other friends here are starting to get more into the gym so they are trying to lose weight or tighten up some areas.” Despite these influences, Adriana said that her own adult behaviors used to be consistent with those modeled by adults in her childhood, but had since changed due to time constraints. She contrasted her current activities and those in which she participated in the past. She said:

I wouldn't say I am as active. I do continue yoga. I was never really a gym person but due to work and other activities, I don't exercise as much as I should. I used to dance and play sports. I still try to keep up with yoga but sometimes I don't have time to do all those things. I do yoga twice a week. ... Exercising is non-existent for the past few months”

(Adriana, African-American, 28 years old).

Other African-Americans for whom healthy physical activity behaviors were the norm in their current social environments reported that their own current physical activity behaviors were consistent with these modeled norms. One woman stated that, “[I]n general ... the African-American culture ... there are still people who are still doing the same old things but I am seeing people who are eating healthy and they are exercising and working out and making good choices

regularly.” She attributed the changes to being exposed or enlightened regarding a healthier lifestyle. Regarding herself, she said, “The people that I have been hanging out with lately, seems to have their finger on the pulse of what is right.” She added that if she was still living in the same place where she grew up, she is “pretty sure” her current behaviors would be unhealthy (Aileen, African-American, 51 years old).

More than half ($n=7$) of the African-Americans’ behaviors were consistent with both those modeled—both active and less active—in their childhood and current environments. For example, Amber, who was exposed to consistent physical activity being modeled among adults in her childhood environment said, “My boyfriend, it is just a part of his life as eating. My mom thinks it is important and we have to make some kind of schedule to do it” (Amber, African-American, 30 years old). Regarding her own current physical activity-related behaviors, she said:

I still work out. I still go to the gym. I have a gym membership with LA Fitness. My boyfriend and I work out together. He is a fire fighter but he is also a fitness trainer for the fire department and so he stays in the gym, which helps to motivate me to make myself get exercise. I work out three times a week. I am at the gym for an hour and a half. Normally I run 30 to 40 minutes, I do some weight lifting and I do some ab-work. (Amber, African-American, 30 years old)

On the other hand, Alicia, whose mom did not use her had Jane Fonda tapes consistently and had her treadmill eventually become a coat rack, said the members of her current environment, like those in her childhood, know they should exercise regularly, but do not. Alicia (whose recent physical activity habits, similar to those of her mother, were less than optimal) thought that, for her best friend, the importance of physical activity “depends on which point you catch her. If something is going on, she will exercise every day. But if you catch her in the low

period, she will say I have not done any physical activity.” She thought her physical activity pattern was similar to that of her friend but added, “Mine is more this - I will try it and I will stick with it for a week and then taper off. She said her friend was somewhat different in that she “has more longevity. Once she reaches her goal or timeframe, she says, ‘Ok, that’s done.’ When she comes to the end, it ends” (Alicia, African-American, 31 years old).

Alicia also indicated that the physical activity norms of her current social environment is also influenced by other factors. For example, socio-economic status played a role in influencing the level of physical activity for people who lived in the same area in which she lives. She said she lives in an area that is, “primarily Black and I notice that when people get on the bus, and they have food in their hands it is usually something fried, like wings (because that’s what’s in our neighborhood) and you can’t help noticing that most of us are overweight.” She added that people do not seem concerned about weight problems until “somebody is in the hospital, for real. Other than that, it is more ‘you know big so and so. Oh yeah, she fat,’ and it is like whatever, a *laisse-faire* kind of thing. I don’t think that in that type of neighborhood it is of any concern.” Alicia then contrasted the situation where she lives with another area. She added, “I also know some Black people who live in a more well-to-do neighborhood where exercise is ‘I have to run.’ My roommate’s sister lives in Buckhead and it is important to have a gym in that place and it is important to run.” She concluded that there is a difference in physical activity levels, “based on demographics” (Alicia, African-American, 31 years old).

In summary, there was a mixture of activity levels for African-American participants. Some reported consistently healthy levels of physical activity, others were not consistent, and yet others said they were involved in no physical activity at all. The African-American women tended to practice behaviors similar to those modeled in their childhood social environment.

However, some of them had changed and were now either more active or less active than the norms modeled by adults in their childhood environments. Those who were less active attributed this to time constraints, and those who were more active attributed this to being more aware of the link to their health, or being influenced by more healthy behaviors modeled by members of their current social environment. There were also some African-American participants whose current physical activity behaviors were similar to those modeled in both their childhood and current environments; for these participants, healthy or unhealthy physical activity behaviors were modeled in both social environments (i.e., healthy behaviors in the childhood and current social environments or unhealthy behaviors in both the childhood and current social environments). African-American participants attributed unhealthy physical activity behaviors to both time and socio-economic status.

(ii) Afro-Caribbean women's behavior and role of their social environments. Although all of the Afro-Caribbean women stated that both the children and the adults within their childhood social environments modeled very active lifestyles, only half ($n=6$) of these participants reported that they now practice physical activity behaviors that are consistent with those modeled in their childhood environments. For example, one participant said she does, "A lot of walking. Basically, that's it. Now and again, I will do some stretching at home and some dancing but mostly walking. I try to walk with my son or by myself. I go to the nearby school and walk around the playfield." (Chantel, Afro-Caribbean, 45 years old) Other forms of physical activities among Afro-Caribbean women included sports and other activities. As one woman said:

At the church that I am right now ... I take part in women's netball and volleyball, and I will go out and do a little tennis if I am not walking. If I am home and don't have much to

do (we get rid of all our work early in the morning), I just go on my treadmill and do half an hour walking. (Carla, Afro-Caribbean, 33 years old)

Although not being as active as they were in the Caribbean, other Afro-Caribbean women try to remain active by incorporating physical activity around the house. One woman said, “I am not as active as I was there. I do try to exercise and I do try to keep myself busy around the home. My child keeps me extremely busy because she is very active.” She tries to limit sedentary behaviors for herself in that she “[does] not watch too much TV. Also, she trains her child in the same way by not having “her watch too much [TV].” Additionally, she walks and does other forms of exercise: “[W]alking up Stone Mountain. We do have DVDs. The one I love is *Insanity* because that gets the cardio going ... walking at the Briscole Park or some other form of walking, like in the community” (Catherine, Afro-Caribbean, 32 years old).

Afro-Caribbean women identified some factors to explain why their current physical activity lifestyle was dissimilar from those modeled in their childhood environments. Catherine, for example, indicated weather affected her physical activity. She said, “In the past couple of months, not as active, but before the winter and fall season, at least three times a week. The winter season is usually when I try to be more active indoors” (Catherine, Afro-Caribbean, 32 years old). Another factor mentioned had to do with security concerns. One woman stated that she stays close to home, for fear of abductions: “I got lazy since I got here. I guess I have this fear of being out. Hearing about all these abductions. I don’t want to be outside. If I do go out, I will walk in the cul-de-sac but don’t go to a gym or anything like that. I plan to, but not right now” (Cherise, Afro-Caribbean, 33 years old).

Cecile and Camille both talked about how time constraints impacted their current lifestyle. Cecile said, “[I have been doing] nothing. Because I like to do a lot of walking and I

have not been doing much of that here. Because of time and work and activities” (Cecile, Afro-Caribbean, 55 years old). For Camille, who has lived in the U.S. for seven years, her life here started out with her doing a lot of walking, but things changed because of time-constraints. She said:

Everything changed when I came here. Initially, I was walking when I didn't have a car so when I got dropped off to work, if I needed to get something to eat I would walk. I joined the gym and then after a while I don't do that anymore [now]. It just seems like there is not enough time in the day between school and work and home and the baby (Camille, Afro-Caribbean, 23 years old).

Camille's current physical activity lifestyle is similar to those of some of her close current family members, who are also from the Caribbean. She said, “I don't think she works out as much as she used to. She has the treadmill in the house but she has been working so much. She works 5 days a week but probably 60 to 80 hours a week. She works really hard.” In talking about her own level of physical activity, she said, “Not that physically active, but we are trying. We got the [workout] video. [My fiancé] did it a couple of days but that's about it. He works and goes to school” (Camille, Afro-Caribbean, 23 years old).

Camille is among the Afro-Caribbean women ($n=9$) who reported current physical activity behaviors that were consistent with those within her current social environment. The same was true for Charlene, who depended on her exercise buddy to accompany her, but “She had a car accident and could not walk. She was in therapy for a while. That did not help my weight at all” (Charlene, Afro-Caribbean, 47 years old). Likewise, Caitlin's current physical activity behaviors were similar to those modeled in her current social environment. She said she

is influenced by the norms all around her. These include people driving everywhere, regardless of how short the distance. Caitlin, who has lived in the U.S. for five years said:

I have been like a couch potato, a sluggish, lazy person. I no longer walk. And if I do, I can't even go that far. Because your environment is so different. ... [E]verybody is driving. Even to the mailbox. You get to the store you want to park at the closest parking spot so you don't have to walk... I find that I have put myself in that same position. I don't walk any more. I don't want to do it because, hey, there is no need to (Caitlin, Afro-Caribbean, 38 years old).

Conversely, Charmaine, who reported healthy physical activity behaviors being modeled in both her current and childhood social environments, was not practicing the same types of behaviors. Although her family members are extremely active, time constraints prevent her from being physically active and she focuses more on ensuring that she eats healthy. In talking about her social environments, she said, “[My mother] has to exercise a lot to keep in shape. [My boyfriend] plays a lot of football. He plays every day. The type of work that he does is carpentry and tiling, so, he is very active. [My cousin] is very active.” She explained that time was a factor and that, “[t]he only thing I do is my job as a hairstylist, unless I am in the mall walking” (Charmaine, Afro-Caribbean, 30 years old)

Some Afro-Caribbean women who had been involved in healthy physical activity behaviors recently ($n=6$), had persons in their current environment who had been a part of their childhood social environment, and who had always practiced healthy activity behaviors. Here are two examples of women with this experience. First, Catherine, who walks and uses DVDs for exercise indoors: “She [mom] has always been [physically active] but even more so now than before. She is living her life a little more for herself now than before. She has always been health

conscious” (Catherine, Afro-Caribbean, 32 years old). Second, Carla, who is constantly involved in exercise activities, said, “My grandmother turns 70 this year, and she still goes on the playfield across from her home and she will be playing and running, and doing track and field, especially in February when it is time for schools to compete. In addition to involvement in sporting activities, her grandmother, “will go in the field and does stuff like weeding the garden.” This participant also shared that in their community, they “have elderly and young folks competing against each other. There will be prizes like a weekend for two at such and such hotel. We have a lot of activity in our community” (Carla, Afro-Caribbean, 33 years old).

To sum up this section on the role of the environments on the physical activity behaviors of Afro-Caribbean women, approximately half of them said they were still practicing healthy levels of physical activity, as modeled in their childhood social environments. Others said that although they were not as active as the adults in their childhood environments, they still tried to incorporate physical activity in their lives. They attributed the decline in physical activity levels to the weather in Atlanta, security concerns, and time constraints. Most Afro-Caribbean participants described physical activity behaviors that were consistent with those modeled by members of their current environment. These were mainly very healthy physical activity behaviors but a few were not healthy. Some of the unhealthy behaviors were practiced by participants who had the same people as members of both their childhood and current social environment but these persons, who also live in Atlanta, were not as active as when they were in the Caribbean. The one Afro-Caribbean participant who said her behavior was not consistent with the healthy physical activity behaviors modeled in both her childhood and current social environments said she did not have time for regular physical activity and that her focus was more on ensuring that she ate healthy.

(iii) *Similarities and differences between the two groups.* The same number ($n=6$) of African-Americans and Afro-Caribbean participants reported healthy current physical activity behaviors. Of these women, all the Afro-Caribbean participants and a few of the African-Americans spoke about the importance of continuing the healthy physical activity lifestyle that was modeled as they were growing up. The other African-Americans that had been practicing healthier physical activity lifestyles than those modeled in their childhood environments spoke of the need to live a healthy lifestyle as they were growing older, or the need to change for health reasons.

The same number ($n=6$) of African-Americans and Afro-Caribbean women reported behaviors that were consistent with those modeled in their childhood environments. Unlike African-Americans however, the physical activity behaviors of all these Afro-Caribbean participants were healthy; the African-Americans reported behaviors that were either healthy or unhealthy, depending on what was modeled by the adults in their childhood environments.

Approximately the same number of African-American ($n=8$) and Afro-Caribbean ($n=9$) women indicated that their recent physical activity was consistent with those of their current social environment. This was not always a positive thing. In some instances, there was little or no physical activity by both the participants and their current friends and family. In other cases, there was consistent involvement in regular physical activity by both participants and their close family and friends. This was true among both the African-American and Afro-Caribbean participants. Also, approximately the same number of the African-Americans ($n=7$) and Afro-Caribbean participants ($n=6$) reported current behaviors that were consistent with members of both their childhood and current social environments.

A major difference between the two groups is that for African-Americans, the current social environment seemed most influential toward participants' involvement in healthy physical activity where for Afro-Caribbean participants, the childhood social environment seemed most influential in this regard. Additionally, the childhood environment of African-Americans, but the current social environment of Afro-Caribbean participants were most influential in their involvement in unhealthy physical activity behaviors.

Participants also talked about factors that they thought impacted physical activity for themselves and others. Both African-American and Afro-Caribbean participants said that they were involved in insufficient physical activity because of time constraints, unavailability of their exercise partner or friend, and concerns about their physical safety. One African-American stated that socio-economic factors also contributed to insufficient physical activity among African-Americans, in general. Additionally, some Afro-Caribbean women talked about the differences in the U.S. environment compared to the Caribbean. One woman said that in the U.S. everyone drives everywhere, in spite of how close rather than walk and she has started to do the same. Other Afro-Caribbean women cited the weather during the colder climates as the reason for insufficiently active lifestyles.

4.3.3 Role of social environment in body image-related attitudes

Research question six explored the roles of the childhood and current social environments in the current body image attitudes of (i) African-American women and (ii) Afro-Caribbean immigrant women, and (iii) sought to identify how the two groups are similar and different. Each participant was also asked to choose (for herself) from the Stunkard diagram, the figure that she considered to be representative of the ideal body. Those choices were then compared with the choices she indicated as the norms within her childhood and current social environments.

(i) African-American women's beliefs and role of their social environments. The choice of the ideal body for African-American participants ranged from Stunkard figure number 3 to figure number 6. Stunkard figures 3-4 or 4 were most frequently chosen as representative of what was considered the ideal body. Three African-American participants chose Stunkard figure number 3 as representative of what she considered to be ideal, six said they would choose figures 3-4 or 4, three said figures 4-5 or 5 and one chose figure number 6. Family and geography appeared to influence not only the body image-related norms within the childhood and current social environments of African-American participants, but these factors also appeared to influence participants. In general, African-American women who grew up in the North most often chose smaller sizes (number 3 on the Stunkard diagram) as the ideal body size. The women from the North, who chose larger sizes (i.e., sizes above the norm- Stunkard figures 3 and 4), said their families would choose the larger, although other friends and family in their environment would choose the smaller sizes. One participant one who grew up in the North, distinguished between North and South perceptions. She said:

It may be because of a North-South thing. I feel that the girls, who are with a little more weight than me, are the ones who get more attention from the guys down here. So, if it was up to me, I would be a #4 (on Stunkard diagram), which I don't think is extreme for what I am, but it is thicker. So, before, a smaller body size would be fine but when you see different things, who gets the most attention, it is usually the thicker girls and I am always called very slim. Skinny. I guess that plays a role for why I want to gain some weight. But I do have people that say I am fine. (Adriana, African-American, 28 years old)

For most ($n=10$) African-Americans, the body image norms of their childhood and current social environments were similar and ranged from Stunkard figure number 1 to number 7. Most ($n=11$) African-American participants chose figures that were similar to those they indicated as the norms for their childhood and current environments—figure numbers 3-6. Seven African-American women chose images similar to those they indicated were important to people in both their childhood and current social environments, while one selected images consistent only with her childhood social environment, three selected images that were consistent only with those in their current social environments, and two chose images that were different from the norms in both their childhood and current social environments.

Five African-American women said that their body ideal had changed since moving to Atlanta. One person, Alexis, said it had gotten smaller over time as her focus is now more about health. The other four participants indicated that their body ideal choice had increased since they had been living in Atlanta and that previously they would have chosen smaller bodies as the ideal. Of these women, Alicia, whose current ideal body size was larger than those that were considered ideal in her childhood environment, said, “I think my size is great but would I like to be a little thicker? Yes.” (Alicia, African-American, 31 years old). The other three women who chose larger body ideals said they were more comfortable, and felt they got more attention as a larger size. One of them, who grew up in the South, talked about how her ideal weight changed as she got older:

I was a four or six (dress size) and anything over that was uncomfortable for me. But, now that I am older, I actually like the size 8 more. It makes me look better. Actually, I like eight and ten (dress size). My face is fuller, and I feel like I look healthier. The influences around me as I got older - I can remember getting more attention and being

told that I was beautiful when I was size eight to ten, than when I was four to six. I get complimented more. I got asked out on dates more and I guess people noticed me more so that was an influence on me as to how I viewed myself. (Amber, African-American, 30 years old)

Another African-American participant whose body ideal had changed was Ada. Whereas she indicated that the norms for both social environments were figure numbers 3-4, she chose figure number 5 as her ideal. She explained that what she considered ideal had changed over time; when she was growing up “I would say slimmer. For other people, they would probably want it to be curvier” (Ada, African-American, 51 years old).

On the other hand, eight participants indicated that their body ideal had not changed. Alicia, for example, indicated that her body ideal is larger than some people in her current environment. Some of them would choose figures 3-4 and others, figures 6-7. However, her own choice of figure number 6 may be more consistent with the norm from her childhood environment, where their choice would be figures 5-6. She indicated that her ideal was influenced by her childhood environment. Not just in terms of size but also in terms of the distribution of weight on the body. She said that she had always thought her choice of the body represented by figure number 6 was an ideal body. She explained:

Most people would think, either you are fat, or you're slim, or you're thick. If your stomach sticks out just that much more than your butt then you are on the fat side. If you have a flat stomach and a fuller bottom then you are thick. If you are more muscular and you have a tight leaner body, you are fit. You are healthy and you take care of yourself. (Alicia, African-American, 31 years old)

In summary, the Stunkard figures chosen by African-American participants as representative of their body ideals were somewhat comparable to those, which they indicated as the norms for members of their childhood and current social environments; whereas the norms for the social environments were reported as figure numbers 1 to 7, participants chose figures numbers 3 to 6 as their ideals. No African-American participant chose a body ideal that was smaller than the norms of their social environments. Family and geography appeared to influence participants' choices. Most participants chose figures that were consistent with both their childhood and current social environments, one person chose consistent with the childhood social environment only, three with the current social environment only and two made choices that were consistent with neither the childhood nor current environments. Changes in body ideals were attributed to a focus on health, moving to the South, being more comfortable with a larger body, getting more attention, and just perceiving that larger was more attractive. Most participants said that their body ideals had not changed since living in Atlanta.

(ii) Afro-Caribbean women's beliefs and role of their social environments. There was little variation in the Stunkard figures chosen to represent the ideal body of Afro-Caribbean women. The choices were also similar, regardless of the Caribbean country in which they grew up. Most ($n=11$) of these women chose Stunkard figure numbers 2, 3 or 4 and one woman chose figure number 5. Most Afro-Caribbean participants ($n=10$) also chose body ideal Stunkard figures that were consistent with the choices they indicated as the norms for both their childhood and current social environments. One participant chose a figure that was consistent with the norms of neither her childhood nor current social environment and one woman chose a size that was more consistent with her childhood, than her current social environment. Afro-Caribbean participants offered a number of explanations for their current body ideals. One explanation

related to the negative perceptions regarding large body sizes within their childhood social environment. Carolyn, for example, said, “Back home, I thought that smaller there was better. Bigger down there would be called fat but that bigger down there is not fat over here. When you come over here you see some body sizes that what we call fat back home is nothing, compared to what we see here” (Carolyn, Afro-Caribbean, 20 years old). They also commented on the negative feedback they receive when they gain weight here in the United States and then visit their childhood countries looking different from what is expected in that social environment. Caitlin said, “I was there in February and I don’t think that I was attractive to people who thought I was attractive many years ago when I had the physique.” (Caitlin, Afro-Caribbean, 38 years old). She recalled some of the comments that were made: “They were ‘man you too fat’ or ‘geez, what’s going on?’ Now, I sense that I was no longer attractive” (Caitlin, Afro-Caribbean, 38 years old).

Other explanations of their attitude toward their body ideals included those from Camille, Carmen, and Catherine. Carmen perceived that in the United States, the ideal body was the very slim body. She was of the opinion that “some black men” want women to be bigger but, in general, “in America, they want you to look like a size 1, but for me, I don’t see it that way. Everyone cannot be a model” (Camille, Afro-Caribbean, 23 years old). Carmen also commented on men’s preference. She said that although they preferred “more meat on the bones,” her ideal body was between figure number 2 and number 3. She added that women in her family tended to be “heavier.” She emphasized that heavier was, “not fatter, just heavier. It could have a lot to do with our muscle density. The average weight in our family is 150 but it looks different than a 150 on somebody else” (Carmen, Afro-Caribbean, 32 years old). Catherine also commented on body type in relation to her ideal body choice. She said her choice was based on the fact that at her

ideal body size, “I feel my healthiest and am active and I didn’t like being extremely skinny” (Catherine, Afro-Caribbean, 32 years old).

The Afro-Caribbean who chose figure number 5 said the members of both her current and childhood environments would choose figures 3 or 4, but in discussing the body image-related norms of her childhood environment, she indicated that in that social environment, correctly proportioned bodies could still be attractive. She explained that she always thought that more mature women would have a little more weight. She said,

I think five is best because not too much fat evident on the outside. She is getting some form of exercise. Her bust is dropping, getting toward middle age but not too bad. She is still keeping self-active and she is a mature woman. (Chantel, Afro-Caribbean woman, 45 years old).

However, Chantel indicated that the body sizes in the United States exceed those with which she was previously accustomed. She said:

Actually being here, I see a lot of body sizes that are extreme. There are the good ones too, but as you get older and the choices, you tend to get too fat and the obesity, the gross body sizes really turns me off. I am very conscious of it even more here than there. (Chantel, Afro-Caribbean. 45 years old)

She also contrasted lifestyles between living in the United States and living in the Caribbean:

Here people are not doing as much to keep themselves at a certain weight whereas in Jamaica people are active. Even if they put on weight, it is not because they are not doing exercise or they are not eating well it is because of something outside of their control or they are focused more on family. Although you are doing things right, exercising, and

eating, family life structure [in the United States] is causing you to do other things that cause you to put on weight. (Chantel, Afro-Caribbean, 45 years old)

However, she was of the opinion that when women “start to refocus again on yourself you tend to lose the weight again” (Chantel, Afro-Caribbean woman, 45 years old).

Chantel and Carla both chose a figure that represented a larger body than those in their current social environment; Chantel indicated that the norm within her current social environment was figure number 3 or 4, and for Carla, her preference was figure number 3 and she indicated that figure number 2 would be the choice of members of her current social environment. Carla was the only Afro-Caribbean woman that said her opinion of what is considered the ideal had changed since living in Atlanta. Her comments were similar to those of Chantel who suggested that older women should not be as thin. Carla explained that, initially, she was, “skinny but then [I] had a flat tummy and legs were ok. As you grow older it’s not important to be that skinny” (Carla, Afro-Caribbean woman, 38 years old). Her thinking changed because as she aged, she expected to be bigger but, she emphasized, “I expect to be bigger, just not big. ... I would love to have a six-pack of an ab with this weight” (Carla, Afro-Caribbean woman, 38 years old).

In summary, there was little variation among the Afro-Caribbean participants in terms of their perceptions of the ideal body. Most participants chose ideals that were consistent with the norms of both their childhood and current social environments (Stunkard figures 2 to 4). Only one participant indicated that her body ideal had changed since she has been living in Atlanta but she attributed the change to the normal expectation that a woman will get a little heavier as she gets older. Factors affecting the current attitudes of Afro-Caribbean women. The factors affecting the current body image-related attitudes of Afro-Caribbean women included their

negative perceptions regarding fat bodies, the negative feedback from members of their childhood social environment when they gain too much weight), and the expectation that as women age, they gain some weight.

(iii) Similarities and differences between the two groups. African-American and Afro-Caribbean participants were similar in a few ways. First, most participants (in both groups) selected ideal body image representations that were consistent with those modeled in both their childhood and current social environments ($n=7$ African-American and $n=11$ Afro-Caribbean). Second, both groups had two women who either thought they looked better with more weight as they got older, or they expected to be a little heavier with age. Third, both groups had women who agreed with the body image norms which dictated that more attractive bodies should include a flat stomach and a fuller derriere.

African-American and Afro-Caribbean participants differed in terms of the figures they chose as ideal images. There was less variation in the choices for ideal image among the Afro-Caribbean women than there were among the African-American women. Most Afro-Caribbean ($n=7$) women chose figure number 2 or number 3, which were chosen by only three African-Americans, although none of them chose figure number 2. Six African-Americans and four Afro-Caribbeans chose figure number 4 or said that 3-4 were ideal. Furthermore, whereas only three African-American and one Afro-Caribbean participants chose figure number 5 or 4-5, one African-American but no Afro-Caribbean participant chose figure number 6.

African-American participants from the North tended to choose body ideals represented by smaller figures. African-Americans from the South and those from the North who were influenced by parents from the South tended to choose figures that represented larger bodies as ideal. African-American women who chose body ideals more similar to the norms of their

current environment tended to choose Stunkard figures that represented bodies that are smaller than the norms they reported for their childhood social environments. It seems that the current social environment of African-Americans may influence healthier body ideals. For Afro-Caribbean participants, many of the people from their childhood social environment were also members of their current environment and therefore the influences of the childhood norms were, in many cases, transferred to their current social environments. African-American participants stated that larger bodies tended to attract more attention from men, whereas the Afro-Caribbean participants indicated that men prefer a little more weight.

5 DISCUSSION AND CONCLUSION

This study explored socio-cultural similarities and differences that may contribute to the obesity-related attitudes and behaviors of African-American women and recently immigrated Afro-Caribbean women². Studying culture—shared values, meanings, behaviors, and beliefs of a group about their life and the world (Lai et al., 2007)—helps public health practitioners understand adherence and lack of adherence to recommended health behaviors (Baexconde-Garbanati & Boley Cruz, 2015). The goal was to identify ways to formulate culturally relevant obesity-related messages targeted at African-Americans and Afro-Caribbean women. Most health interventions targeting “Blacks” or African-Americans have failed to recognize the diversity within the group. Ascertaining the similarities and differences in obesity-related beliefs and behaviors of Afro-Caribbean immigrants and the larger African-American population could improve the efficacy of health interventions (Coreil, 2009; Komesaroff & Thomas, 2007) by either identifying ways to tailor information specifically to the Afro-Caribbean subgroup or to

² The women had been living in the United States for no more than eight years.

the larger group based upon the commonalities between groups. Thus, the findings of this study may be used to inform the development of differentiated, undifferentiated, and culturally relevant obesity-related messages targeted toward African-American women and Afro-Caribbean immigrant women living in Metro Atlanta, Georgia.

Social cognitive theory (SCT) guided the development of an interview guide. SCT is widely used in the study of health and obesity-related behaviors (e.g., Calfas & Hagler, 2006; Canavera et al., 2007) because it recognizes that attitudes and behaviors are determined by both personal and environmental factors (Bandura, 2004). This study focused on identifying socio-environmental factors that contribute to obesity-related attitudes and behaviors. The first set of research questions sought to identify similarities and differences in the obesity-related attitudinal and behavioral norms of participants' childhood and current social environments. The second set of research questions explored the extent to which their obesity-related attitudes and behaviors were similar to those of people within their respective social environments. The study revealed that there were both similarities and differences in the food-, physical activity- and body image-related norms of participants' childhood and current social environments and their current attitudes and behaviors.

In this chapter, findings regarding participants' recent attitudes and behaviors are discussed in relation to the reported norms of their social environments. Study findings are also discussed with respect to previous research and SCT. First, however, characteristics of the two groups of women interviewed are discussed to provide context for the findings. This is followed by the main study findings, which, stated more specifically, include discussions of the similarities and differences in food, physical activity, and body image social environmental

norms and participants' attitudes and behaviors. The implications of the findings, recommendations, and study limitations are then presented.

5.1 Sample characteristics

Participants' dominant identity, communication with friends and family, and obesity beliefs were considered when contextualizing findings from this study (see Table 5.1 for a summary). These characteristics aided in understanding participants' lived experiences, and thus informed recommendations for the design of culturally relevant obesity-related messages, which are discussed later in this chapter.

Dominant identity. Women in this study were asked to identify the aspect of their identity that was most important to them. This information was sought to (a) provide context for interpreting participants' reports regarding their attitudes and behaviors, and (b) ascertain what was most crucial to participants to ensure that these considerations informed health messaging. Participants in this study were asked to only identify their main identity. However, practitioners must be mindful that although dominant identity plays a role in decision-making, in general, women make decisions based on multiple identities. Where intersecting identities are ignored, women are likely to reject health messages (Vardeman-Winter et al., 2013).

Most women in both groups said that being a mom was most important. African-Americans specified that this aspect of their identity included being a member of their respective families. It was not surprising that African-Americans mentioned family as the most important aspect of their identity; African-Americans are considered to be a collectivist sub-group within the population (Parker & Grinter, 2014). Caribbean nationals are also considered to be among the collectivist societies of the world (Hofstede Center, n.d.), thus the importance of their role as

mom in the family. Collectivist societies are symbolized by groups working together to succeed; in the health arena, they work toward health wellbeing (Parker & Grinter, 2014).

Faith was the second most common response among African-American women when asked about their identities. This finding is similar to past studies that recommend church and spiritual leaders help African-Americans reach health-related goals (Archibald, 2011). For Afro-Caribbean women, the second most common response relative to their identity was their nationality, which explains many of their attitudes and behaviors reported in this study. While individual's identity may influence their obesity-related attitudes and behaviors, the role of the social environment was the focus of this study. Therefore, background information about participants' communication with their family and close friends was also sought.

Communication with friends and family. Knowing about communication norms between groups of interest and members of their social environments is important for message design and dissemination. This type of information can be an indicator of the sources of influence for participants' attitudes and behaviors. Additionally, knowing about immigrants' communication patterns with respect to their homeland and native culture may signify the extent to which they still identify with homeland attitudinal and behavioral norms. According to Croucher (2011), communicating through social networking helps immigrants to reduce anxiety and improve their emotional state by maintaining ties with their homeland and native cultures while adapting to the American culture. Maintaining these ties through consistent communication therefore, is crucial to the mental health of immigrants, but is also a means of maintaining a sense of identity and connection with cultural attitudes and behaviors with which immigrants are familiar.

This study revealed that communication with friends and family was important to both groups. However, African-Americans reported more frequent communication with their friends,

while Afro-Caribbean participants reported more frequent communication with family from their childhood social environment. Afro-Caribbean participants also reported use of a wider variety of communication channels than African-Americans, and more deliberate efforts at audio-visual communication with members of their social environments.

Table 5-1 Contextual group characteristics

	SIMILARITIES		DIFFERENCES	
	African-Americans & Afro-Caribbeans	African-Americans n=13	Afro-Caribbeans n=12	
Sample description	<ul style="list-style-type: none"> • Almost all had received at least some college education 	<ul style="list-style-type: none"> • All born in the United States identified as African-American • 76.0% overweight or obese 	<ul style="list-style-type: none"> • All born in English-speaking Caribbean women, identified as Afro-Caribbean, and at time of interview had lived in the United States for no more than 8 years • 50.0% overweight or obese (includes 2 women who recently gave birth) 	
Dominant identities	<ul style="list-style-type: none"> • Mom (#1 choice) 	<ul style="list-style-type: none"> • Also among top choices: family, faith, profession 	<ul style="list-style-type: none"> • Also among top choices: individuality, nationality 	
Communication with friend and family	<ul style="list-style-type: none"> • Communication with family important 	<ul style="list-style-type: none"> • More frequent communication with friends than Afro-Caribbean participants 	<ul style="list-style-type: none"> • Compared to African-Americans: <ol style="list-style-type: none"> (a) More frequent communication with family from childhood environments, (b) Utilized wider variety of channels, (c) More deliberate about audio-visual communication 	
Beliefs about obesity in the United States	<ul style="list-style-type: none"> • Obesity is a major problem in the U.S. • Parents and socioeconomic factors to blame. • Perceive that African-Americans are disproportionately affected by obesity. 	Obesity attributions: <ol style="list-style-type: none"> (a) History of oppression/slavery; origin of Soul food (b) Convenient access to fast food 	Obesity attributions: <ol style="list-style-type: none"> (a) Individual choice 	

Obesity beliefs. Knowing about participants' obesity beliefs helps to bring perspective to their attitudes and behaviors regarding their own body size. More of the African-American participants in this study were overweight or obese, but both groups agreed that obesity is a big

problem in the United States. Women within each group said they thought African-Americans were disproportionately affected by obesity. More Afro-Caribbean than African-American women mentioned their concern about the effect on children; both sets of participants blamed parents for the level of obesity among children. Women within both groups attributed the general obesity level to socioeconomic status. African-Americans also attributed obesity levels to historical disenfranchisement and the effects of the diets of slaves on current food choices. This is similar to findings in previous studies (Airhihenbuwa & Kumanyika, 1996; Horowitz et al., 2004). Additionally, group attitudes differed regarding other attributions for the level of obesity in the United States. African-Americans blamed convenient access to fast food, but Afro-Caribbean participants indicated that individuals need to take responsibility for their own actions.

This section provided some context toward understanding participants' recent obesity-related attitudes and behaviors. Further explanation of their attitudes and behaviors are provided by participants' reports regarding the obesity-related norms of their childhood and current social environments. These norms are discussed in the following section, which examines the findings of this study in relation to extant literature.

5.2 Obesity-related norms of childhood and current social environments

The first set of research questions sought to identify cultural norms related to participants' food-, physical activity-, and body image-related attitudes and behaviors. Identifying these cultural attitudes and behaviors is vital to designing culturally relevant messages (Airhihenbuwa et al., 1996). Cultural factors may be helpful or harmful, relative to the performance of healthy behaviors. Being aware of these factors equips practitioners to address obesity-related issues in ways that are relevant to the target group. Acknowledging those factors in program design, therefore, serve to enhance salience for the audience.

Bandura (1998) posited that behavioral norms are affected by social norms. This suggests that health-related attitudes and behaviors of the African-American and Afro-Caribbean participants of this study would be similar to the related norms within their social environments. In this current study, the role of both the childhood and current social environments were considered. This section discusses findings regarding food-, physical activity-, and body image-related norms within participants' social environments.

5.2.1 Food-related social norms

This section discusses some details pertaining to food types and food preparation behaviors that were modeled in participants' childhood social environments and those modeled in their current social environments. Table 5.2 shows similarities and differences between the food-related norms within both environments of African-American and Afro-Caribbean participants. In this section, healthy and unhealthy norms within participants' childhood and current social environments are discussed in relation to other explanatory findings from this study. Findings regarding behavioral norms are also discussed in light of extant literature, and SCT.

Consistent with SCT, both African-American and Afro-Caribbean participants indicated that their food-related norms were influenced by their social environments. There was a wider variety of food norms in the childhood and current social environments of African-Americans—both in terms of food type and preparation methods—than Afro-Caribbean participants, who reported similar types of food and preparation methods, regardless of the country where they grew up. For African-Americans, the variety in their food-related norms seemed to be due to regional differences, the influences of their parent's cultural backgrounds, and having more cultural variation in their social environments. For instance, African-Americans who grew up in

the South ate a lot of Soul food, while the African-Americans who grew up in coastal areas were more similar to the Afro-Caribbeans; both grew up eating a lot of fish. The two groups differed, however, in the way fish was prepared. African-Americans described the use of excessive amounts of salty seasoning, whereas Afro-Caribbean participants described healthy food preparation norms.

Table 5-2 Group similarities and differences in food-related norms (RQ 1)

SIMILARITIES		DIFFERENCES	
Both groups	African-Americans n=13	Afro-Caribbeans n=12	
Childhood Social Environment			
<ul style="list-style-type: none"> African-Americans from coastal areas and Afro-Caribbeans consumed a lot of fish 	<ul style="list-style-type: none"> More variety in food types and preparation methods Norms influenced by: <ol style="list-style-type: none"> Geography Parental background School environment Cultural diversity of environment Negative perception toward food and preparation method (unhealthy, greasy) 	<ul style="list-style-type: none"> Similar food types among participants despite country where they grew up Positive perception toward food and preparation methods (healthy, wholesome) 	
Current Social Environment			
<ul style="list-style-type: none"> Both included some healthy food-related choices 	<ul style="list-style-type: none"> More variety in food types and preparation methods compared to Afro-Caribbean social environment Food norms differ from childhood social environment <ol style="list-style-type: none"> Some healthier; (b) Some less healthy African-Americans had fewer persons from their childhood environment as part of their current social environment 	<ul style="list-style-type: none"> Less variety in food types compared to current social environment of Afro-Caribbean participants Food norms very similar to norms of childhood social environment but a few not as healthy Many Afro-Caribbean participants reported that individuals in their current environment were also part of their childhood social environment 	

The two groups of participants indicated that both healthy and unhealthy foods were consumed by people in their current social environments. However, Afro-Caribbean participants described norms in their current social environment as more similar (than not) to the food-related norms of their childhood social environment, which they described as healthy and wholesome.

On the other hand, African-American participants indicated that the food-related norms within their childhood and current social environments were dissimilar; some social environments displayed more healthy and other less healthy food behaviors.

Although African-American food may be viewed as unhealthy, the women indicated that there are some members of their social environments who expect them to continue eating in accordance with cultural food traditions. Commentary from one African-American woman in particular exemplifies a significant difference between the expectations within the social environments of African-American and Afro-Caribbean participants. The African-American woman in question shared comments made by friends from where she was raised. She was scolded for the possibility that she may have become bourgeoisie, and may have changed from eating anything other than what she (the African-American participant) now views as the unhealthy fried foods they ate growing up. However, in the case of Afro-Caribbean women, members of their social environment are constantly warning them against unhealthy food-related behaviors. Social pressure is brought to bear in both situations, but with opposite outcomes. Members of the childhood social environments of Afro-Caribbean participants check on them regularly via the many communication devices they use for staying connected. Disapproval from their social environments provides peer pressure that encourages the maintenance of healthy food-related behaviors. Disapproving peer pressure (in this case, imposed on the African-American) impedes the production of healthy behavior, thus the maintenance of eating unhealthy foods (Bandura, 2004).

For both African-Americans and Afro-Caribbean participants, identity plays a role in the attitudes and behaviors within their social environments. In the case of the African-American woman, in eating “bourgeoisie,” she risked losing her identity as one of “us.” This negative

evaluation, referred to in SCT as an inhibitor to healthy eating, is actually a deep-seated cultural norm, an injunctive social norm (Cohen et al., 2000), that contributes to group distinctiveness. Healthy eating is likely to be met by resistance by friends and family, as was the case for this participant (Airhihenbuwa & Kumanyika, 1996; Bandura, 2004). In the case of the Afro-Caribbean women, they indicated strong national identity. If this identity is also true of the members of their current social environments that could contribute to their commitment to maintain the food-related norms of their childhood social environments.

Overall, the food-related norms within the social environments of African-American and Afro-Caribbean participants seem to be linked to peer-pressure, identity, and health concerns. In general, the food-related norms of the social environments were unhealthier for African-Americans and healthier for the Afro-Caribbean women. For African-American participants, food-related norms were more varied than those of the Afro-Caribbean participants due to diversity in parental backgrounds and geographic and cultural differences where the African-American women grew up. Food-related norms within the social environment play a crucial role in the behaviors that directly influence one's BMI status. The other major factor that affects BMI status is the level of physical activity that is modeled within social environments. The following section lays out a discussion of the physical activity-related norms, as reported by participants, related to their childhood and current social environments.

5.2.2 Physical activity-related norms

Table 5.3 summarizes the similarities and differences in physical activity norms. African-American and Afro-Caribbean participants described similar physical activity norms for children in their childhood social environments. Both groups said children were very active. They were consistently involved in various types of fun activities, which kept them physically active. Both

groups also reported that boys were more involved in fun physical activities than girls. Despite the similarity in the level of activity among children in the childhood social environments of African-American and Afro-Caribbean participants, there was a marked difference between both groups in terms of the physical activity behaviors among adults in their childhood social environments. Afro-Caribbean participants reported that walking was a means of transportation for everyone within their childhood environments. In addition, it was the norm for both children and adults of all ages to be regularly involved in sporting activities. This was true for all Afro-Caribbean participants, regardless of the country in which they grew up. In contrast, there were only a few African-American participants who reported consistently active childhood social environmental norms among the adults. Otherwise, there was not a lot of physical activity for the adults in the childhood social environments of the African-American participants. A few participants who grew up in walking cities or in the South where they had to use public transportation reported, however, that physical activity was limited to walking as a means of transportation, when necessary.

Both groups also shared that there were some persons within their current social environments who were physically active, while others were not sufficiently active, or not active at all. Fewer African-Americans than Afro-Caribbean participants, reported consistently active members in their current social environment. Additionally, due to health concerns, a few members of the current social environment of African-American participants had become more physically active than when they were a part of participants' childhood social environment. Afro-Caribbean participants, on the other hand, reported that some persons in their current social environments had become less physically active than when they were a part of participants' childhood social environment. This translated to African-Americans reporting that there were

more people in their current social environment versus their childhood social environment that were consistently physically. The converse was true for Afro-Caribbean participants. They reported that fewer people in their current social environment, versus their childhood social environment, were consistently physically active.

Table 5-3 Group similarities and differences in physical activity-related norms (RQ 2)

SIMILARITIES		DIFFERENCES	
Both groups	African-Americans n=13	Afro-Caribbeans n=12	
Childhood Social Environment			
<ul style="list-style-type: none"> • Children very active • Boys somewhat more active than girls in fun activities 	<ul style="list-style-type: none"> • Only African-Americans who grew up in walking cities or in the South where they had to use public transportation walked a lot • Consistent physical activity lifestyle modeled in childhood environments of few African-American participants • Physical activity norms described by African-Americans varied by geographic region where they grew up 	<ul style="list-style-type: none"> • Walking was a means of transportation for all Afro-Caribbean participants • Physical activity was a priority at all ages (walking, sports, working). Physical activity lifestyle modeled by everyone • Regardless of Caribbean country in which they grew up, all Afro-Caribbean participants described very active social environments 	
Current Social Environment			
<ul style="list-style-type: none"> • Both groups of participants described the physical activity norms of their current social environment as comprised of some persons who some are physically active and others who are not physically active 	<ul style="list-style-type: none"> • Few members of current social environment model consistently active lifestyle • A few members of the current social environment of African-Americans had recently become more physically active than when they were members of participants' childhood environment • African-American participants reported more people in their current social environment that were physically active than in their childhood social environment 	<ul style="list-style-type: none"> • Half of Afro-Caribbean participants reported consistently active members of their current social environments (including the elderly) • A few members of the current social environment of Afro-Caribbean participants had recently become less physically active than when they were members of participants' childhood environment • Afro-Caribbean participants reported fewer people in their current social environment that were physically active than in their childhood social environment 	

Previous studies identified women's domestic duties, lack of support for the involvement of women in physical activity for exercise purposes, and desire to maintain hairstyles as

contributors to insufficient exercise among African-American women (Gletsu & Tovin, 2010). This current study found that some African-Americans whose friends and family were not involved in regular physical activity reported a perceived lack of importance for physical activity among members of their social environments. They also described this perceived lack of importance and commensurate behavior as “the norm.” Previous research has suggested that perceived personal importance and necessity of exercise for health are associated with healthy behaviors in African-American women (Affuso, Cox, Durrant, & Allison, 2011). Therefore, where it is the norm that exercise is perceived or deemed unimportant, little or no physical activity should be expected. Since modeling and reinforcement of unhealthy behaviors influence the reproduction of unhealthy behaviors (Gaines & Turner, 2009), such behaviors are expected to reinforce unhealthy norms.

Unlike the African-Americans, Afro-Caribbean participants whose friends and family members practiced inadequate levels of physical activity discussed the friends’ and families’ interest in, and support for, physical activity. As a matter of fact, they said inactivity was not the norm for them. They also offered plausible explanations (e.g. time constraints) regarding the reasons why these friends and family members had not been exercising on a regular basis. So, although these persons in the current social environments of Afro-Caribbean participants may have grown up seeing healthy physical activity behaviors modeled in their childhood social environment and they still perceive that such activities are important, other factors impede them from practicing these healthy behaviors regularly or consistently.

Overall, then, African-Americans had more, whereas Afro-Caribbean had fewer, people in their current social environment than in their childhood social environment who modeled healthy physical activity norms. Also, both groups of women had healthy and unhealthy

behaviors modeled in their current social environment. In addition to the impeding factors discussed by both groups of participants, friends and family members of African-Americans were at more of a disadvantage in that they, unlike the friends and family members of Afro-Caribbean women, had not been involved in social environments where physical activity was perceived as important to health.

Healthy food- and physical activity-related behaviors are necessary for healthy weight. (CDC, 2015c, 2015d). In addition, as is the case with modeled food and physical activity behaviors, body image-related attitudes that are modeled within the social environments potentially influence the attitudes of others within the social environments. The next section lays out a discussion about the body-image related norms revealed in this study.

5.2.3 *Body image-related norms*

Participant's reported body image-related attitudinal norms of members with their childhood and current social environments are discussed in this section. Table 5.4 summarizes related similarities and differences that were revealed in the study. Norms related to body size and the meanings associated with body size discussed here, along with possible explanations for the findings.

The body image-related norms within the childhood and current social environments of African-Americans varied more than for the Afro-Caribbean participants. Many African-Americans reported larger, and a wider range of, body ideals as the norm in their childhood and current social environment; almost all Afro-Caribbean participants reported smaller to medium, and little variation in, body ideals for the norms of their childhood and current social environments. Additionally, as opposed to Afro-Caribbean participants, no African-American

participant indicated that some members of their current social environment would consider Stunkard figure numbers 3 and 4 to be too fat.

Table 5-4 Group similarities and differences in body image-related norms (RQ 3)

SIMILARITIES	DIFFERENCES	
Both groups	African-Americans n=13	Afro-Caribbeans n=12
Childhood Social Environment		
<ul style="list-style-type: none"> • Both groups reported that in their childhood social environments: <ul style="list-style-type: none"> (a) some men preferred bodies which “gave them something to hold” (b) flat abdomens are attractive (c) shapely body are more attractive (d) women are desirous of pleasing men by maintaining body shapes that men find attractive 	<ul style="list-style-type: none"> • Many African-Americans reported larger body ideals as the norm in their childhood environments • Wide range of reported body ideals among African-Americans (Stunkard figure numbers 2 to 7) • Body ideals influenced by geographic region and familial background • Wide variety of meanings of body sizes: (a) for some smaller was unattractive, whereas for others smaller was attractive; (b) for some thick was attractive; (c) for some, large was attractive 	<ul style="list-style-type: none"> • Almost all Afro-Caribbean reported smaller to medium body ideals as the norm in their childhood environments • Little variation in reported body ideal norms among Afro-Caribbean participants (Stunkard figure numbers 2 to 5) • Body ideals same or similar regardless of the Caribbean country where Afro-Caribbean participants grew up • Little variety in meanings of body sizes: (a) small to medium - more attractive; (b) large - unhealthy
Current Social Environment		
<ul style="list-style-type: none"> • Some women from both groups said members of their current environment would consider Stunkard diagrams 1 and 2 too skinny or unhealthy and figures 7, 8 and 9 as too large or unhealthy 	<ul style="list-style-type: none"> • Wider range of body ideals among and within the current social environments of African-American participants • Most reported that Stunkard figures 3 or 4 found be ideal in their current social environment • African-Americans somewhat accepting of Stunkard figures larger than the stated ideals • Some African-Americans reported that Stunkard figure number 3 would be too skinny for some members of their current social environment • No African-American stated that Stunkard figure numbers 3 or 4 would be too fat 	<ul style="list-style-type: none"> • Almost all Afro-Caribbeans reported the same or similar Stunkard figure to represent ideal body • Most reported Stunkard figures 2-4 as ideal among their current social environment • Afro-Caribbean participants resistant to Stunkard figures larger than stated ideals • No Afro-Caribbean participant reported that Stunkard figure number 3 would be too skinny for any members of their current social environment • Many Afro-Caribbean participants reported that anything above Stunkard figure number 4 would be considered too fat and one persons stated Stunkard figures 3 and 4 would be considered too fat by some members of their current environments

There were, however, African-Americans for whom smaller body sizes were considered the ideal in their childhood social environment, and others for whom the choice was larger. African-American participants also reported that the members of their current social environments would be somewhat accepting of bodies represented by Stunkard figures that are larger than the body image norms, whereas Afro-Caribbean participants indicated that members of their current social environment would be very resistant to Stunkard figures that represented larger bodies. A similarity between the two groups of participants was that women from both groups indicated that there were some people within their current social environment who would consider small bodies (represented by Stunkard diagram numbers 1 and 2) to be too small and large bodies (represented by Stunkard diagram numbers 7, 8 and 9) to be too large.

Not only was there more variation within the social environments of African-American participants relative to Stunkard figure choices, but the meanings of body size also varied more for African-American participants than for Afro-Caribbean participants. Most of the Afro-Caribbean women indicated that smaller to medium-sized shapely bodies were considered healthy and attractive, but also stated that some men may prefer their women to be more medium than small. For some African-American women the norm was that smaller bodies were considered unattractive in their social environment, while for others smaller was attractive, and for yet others large and/or “thick” was considered attractive. Both groups reported that in their childhood social environments some men preferred bodies that gave them something to hold on to and that women wanted to maintain shapes that men found attractive. Both groups of women also said that in their social environments, flat abdomens and shapely bodies were attractive.

SCT may help to explain the differences between African-American and Afro-Caribbean participants. The norms for African-American social environments varied because in general,

there are different cultures in various geographic regions of the United States; these cultures determine the norms for any particular region. Afro-Caribbean participants reported very similar socio-environmental norms among themselves because the culture in the region of the Caribbean where members of their social environments are from is more similar. This current study contradicts the finding of Fraser (2003), who states that Afro-Caribbeans prefer a larger body and a larger body is viewed as healthy. However, findings regarding larger body ideal norms for African-Americans were supported by BMI calculated for participants in this study based on self-reports of height and weight; this study found that almost all African-American participant was overweight or obese. The CDC (2015b) also notes that non-Hispanic Blacks have the highest age-adjusted rates of obesity in the United States.

In summary, some findings of this study regarding body image were supported by previous research, whereas others were not. African-American and Afro-Caribbean participants were found to be similar in terms of their reports that men preferred women's bodies to be shapely and that the abdominal areas of women's bodies should be flat. The main differences were that there was more variety and a wider range in the body image norms and associated meanings within the social environments of African-Americans than for Afro-Caribbean participants.

This study focused on the role of social environments on obesity-related attitudes and behaviors. The food-, physical activity, and body image related norms discussed above provide a basis for discussing participants' attitudes and behaviors. The following section addresses how the environments affect participants' behaviors.

5.3 Role of social environments on obesity-related attitudes and behaviors

SCT posits that the social environment influences attitudes and behaviors via observational learning, i.e., people who model behavioral norms. Established norms are then reinforced through approval or disapproval from significant sources within the social environment (Bandura, 2004). This section of the study discusses the comparison of participant's attitudes and behaviors with those from their social environments. The discussion addresses participants' food-, physical activity, and body image-related attitudes and behaviors relative to other findings of this current study and previous studies.

5.3.1 Participants' recent food-related attitudes and behaviors

The section begins with a discussion of participants' food-related behaviors. Table 5.5 summarizes the similarities and differences between African-American and Afro-Caribbean participants' food-related attitudes and behaviors relative to those within their social environments. The findings of this study relative to participants' healthy and unhealthy attitudes and behaviors are discussed. Impediments to healthy food-related behavior and possible explanations for behaviors are also presented.

Consistent with the food-related norms of their social environments, the recent behaviors among African-American participants were more varied than those of the Afro-Caribbean women. This variety was influenced by both where they and their parents grew up (e.g., regions of the U.S. or other country of origin) and by their friends from different countries and cultures, as well as from different regions of the United States. Also consistent with the food-related norms among their social environments, the recent food-related behaviors among Afro-Caribbean participants were similar, despite their countries of origin.

Table 5-5 Group similarities and differences – Social environments on food-related attitudes and behaviors (RQ 4)

SIMILARITIES	DIFFERENCES	
Both groups	African-Americans n=13	Afro-Caribbeans n=12
<ul style="list-style-type: none"> • Health-related concerns influenced current food-related behaviors of both African-American and Afro-Caribbean participants • Matrilineal influence of food-related behaviors was reported by both African-Americans and Afro-Caribbean participants 	<ul style="list-style-type: none"> • Fewer than half of African-Americans reported practicing food norms from their childhood environment • Healthier eating influenced more by current environment than by childhood social environment • Age and health concerns cited as reasons for food-related behavior changes and adopting (healthier) behaviors modeled in current social environment • Current social environment seemed to influence African-American participants more toward healthier behaviors than their childhood environment • African-Americans are more comfortable with cultural variety in food norms and did not question the quality of American foods 	<ul style="list-style-type: none"> • The majority of Afro-Caribbean women reported practicing food-related norms of their childhood social environment • Healthier eating influenced more by childhood social environment than by current environment • Time constraints cited as reason for food-related behavior change and adopting (unhealthy) behaviors which may be modeled in neither childhood nor current social environment • Childhood social environment seems to be more influential toward healthier behaviors than current environment of Afro-Caribbean participants • Afro-Caribbeans more comfortable with foods from their culture and questioned the quality of American foods so they strive to find Caribbean foods

Healthier food-related behaviors were influenced more by the current social environment of African-Americans (than their childhood environment) and by the childhood social environment of Afro-Caribbean participants (than their current social environments). Although some members of the current social environment of African-Americans modeled unhealthy behaviors, their current social environments included persons who had changed from the unhealthy ways of eating as children, and included healthy eaters whom participants met in more recent years. Afro-Caribbean participants' current environment included some members of their childhood social environment, all of whom were reported as healthy eaters. These persons now serve as models who reinforce consistent healthy food-related behaviors. Participants' recent food-related behaviors may also be explained by their attitudes toward the food-related norms of

their social childhood environments. Whereas a few African-American women recalled healthy food-related behaviors in their childhood social environments, most had negative perceptions about food-related childhood norms and fewer than half of them reported practicing the norms of their childhood social environments. Conversely, all Afro-Caribbean cited the healthy attributes of their childhood food-related social norms and proudly declared that they continue these traditions here in the United States. This is consistent with previous research (Bramble et al., 2009). Most Afro-Caribbean participants shared that their own recent food-related behaviors closely resembled those that were modeled in their childhood environments.

The women in both groups expressed a desire to eat healthy. Some African-Americans reported that they had changed their recent food-related behaviors for aging and health reasons. Bramble et al. (2009) also found that African-American women change food-decisions for health reasons. Afro-Caribbean women's childhood and current social environments, along with continued communication with others about eating behaviors, provide positive reinforcement and facilitate maintenance of the healthy eating habits with which they were raised (Bandura, 2004).

Despite the desire to be healthy, there were some attitudes and other impediments that mitigate this desire. A few African-American women in this study said that they had made the decision to be less of a slave to the scale. Others said that they had just become lax or more comfortable with themselves. These women reported that their food-related behaviors had become less healthy. Participants also described facing barriers to healthy food habits. These challenges are categorized in SCT as inhibitors to healthy behaviors (Bandura, 2004). For example, the food preferences of other family members, some of whom did some food shopping, influenced their eating habits. Some Afro-Caribbean participants were married to Americans and spoke about their husband's "unhealthy" food preferences, plus the fact that they may have only

one car in the family. Because of this, participants are unable to do their own shopping and sometimes just resort to eating what is available at home. Some African-Americans described similar issues in their households. Although these inhibitors exist in their homes, some of the African-American participants shared that they are able to eat healthier with friends who eat healthy, whereas Afro-Caribbean are more limited in their mobility.

Some Afro-Caribbean women also faced an initial challenge in accessing Caribbean foods here in the United States. Some found healthy solutions, for example, locating vendors (such as the Farmers Market), where they purchased ethnic foods. Their meals were comprised mainly of these foods. Others incorporated some American foods and prepared them using traditional Caribbean food preparation and cooking methods, though they questioned whether some of the foods that were labelled “organic” were, in fact, organic. Archibald (2011) also found that Afro-Caribbean women gradually incorporate American foods into their diets; however (in the Archibald, 2011, study), concerns about organic food were related to affordability. Other studies (e.g., Satia-Abouta et al., 2002) indicate that mixing traditional ethnic foods with American foods is not an unusual practice among immigrants (Satia-Abouta et al., 2002). Among the Afro-Caribbean women in this current study who did incorporate American foods, some stated that the food, prepared in traditional ways, still did not taste the same as it did “back home.”

Satia-Abouta et al.’s (2002) model of dietary acculturation suggests that although immigrants may prefer traditional foods, time constraints, advertising, accessibility to, and availability of, American foods, among other factors, may lead to a change in food-related behaviors. These factors were found to affect some of the Afro-Caribbean women who experienced time, convenience, and accessibility challenges related to their traditional diet. One

Afro-Caribbean woman indicated that because of the time factor, she had not regularly incorporated Caribbean cooking methods in her recent lifestyle. Another Afro-Caribbean participant said that when she arrived here in the United States, lured by advertising and convenience, she just went straight for the fast food and soon realized the effects it started to have on her body. She put on weight. However, constant reminders from her cousin helped her to revert to the healthier eating behaviors from her childhood. This exemplifies two concepts linked to SCT. The first is the role of social environments in reinforcement of behaviors. Seeing her cousin continue to model healthy eating provided vicarious reinforcement, while recalling the food-related norms from her childhood social environment provided past reinforcement, also known as traditional behaviorism (Bandura, Ross, & Ross, 1963). The second SCT concept is the effect, otherwise called outcome. According to SCT, the outcome associated with a behavior serves to reinforce or discourage behavior and influences future decisions regarding that behavior. In this case, effect is the weight gain associated with not continuing the food norms and eating fast foods instead. This outcome acts as a motivator to refrain from the unhealthy behavior of eating fast food on a regular basis.

Finally, although both groups discussed the important role their mothers, who passed down information about the traditions related to cooking methods and food choices, the influence was different for both groups of women. Literature suggests that even though mothers and daughters may no longer be living together, there is a matrilineal influence on food behaviors (Johnson et al., 2010). The distinction between the two groups of participants was that Afro-Caribbeans noted that their mothers provided information related to the health-related features of their foods and cooking methods whereas, African-Americans recalled discussing recipes and the history of how the poor diets of slaves eventually resulted in what is known today as “Soul

food.” Although many African-American participants described the food-related norms within their social environments as unhealthy, it may be expected that African-Americans should not depart from these norms because, as some women explained, their historical identity is wrapped up in their food, specifically Soul food. The attitude of the Afro-Caribbean participants may be due to the strong sense of national identity indicated by the Afro-Caribbean participants in this study and the consistent reminders of members of their childhood environment about the importance of continuing to eat healthy, and the effect of matrilineal influence.

In summary, recent food-related behaviors of the African-American and Afro-Caribbean women in this study were consistent with food-related norms of their respective social environments. Relative to those of Afro-Caribbean participants, the recent food-related behaviors of the African-American women were more varied. Healthier behaviors were influenced by the current social environments of African-Americans, but by the childhood social environments of Afro-Caribbean participants. Women in both groups desire to eat healthy but face challenges. For example, African-Americans faced challenges associated with their identity (i.e., pressure to maintain certain food customs) and women in both groups were challenged by unhealthy behaviors being modeled within their current social environments. Additionally, Afro-Caribbean participants reported challenges associated with being recent immigrants. To gain fuller understanding of the role of social environments on the obesity related behaviors of the participants in this study, a similar comparison was done relative to participants physical activity behaviors.

5.3.2 Participants’ recent physical activity-related attitudes and behaviors

The recent behaviors of African-American and Afro-Caribbean participants were compared to the norms they reported within their social environments. The similarities and

differences found as a result of this comparison are presented in Table 5.6. This section discusses participants' recent healthy and unhealthy physical activity behaviors relative to the norms modeled in their social environments, and discusses other factors that could be influencing both healthy and unhealthy behaviors.

An examination of responses from African-American and Afro-Caribbean participants revealed that their recent physical activity behaviors were generally consistent with the norms modeled in their social environments. The behaviors reported by some women were consistent with those within their childhood social environments, while for others, their behaviors were consistent with those from their current social environments. Yet others reported behaviors that were consistent with the norms of both social environments; this was true in cases where the norms for both social environments were similar.

Among the African-Americans who reported behaviors consistent with those modeled in their childhood social environments, some said their recent physical activity behaviors were healthy. Others said they were practicing unhealthy physical activity behaviors. On the other hand all Afro-Caribbean participants who indicated that they were influenced by the norms of their childhood social environments said they had been practicing healthy behaviors.

Both African-American and Afro-Caribbean women reported behaviors that were consistent with those modeled among members of their current social environments. African-American participants seemed to be influenced more toward healthier physical activity behaviors by the behaviors among members of their current social environment versus those they saw modeled in their childhood social environment. However, for Afro-Caribbean participants, their current social environment seemed to influence them more toward less healthy physical activity behaviors than those modeled in their childhood social environment.

Table 5-6 Group similarities and differences – Social environment on physical activity-related attitudes and behaviors (RQ 5)

SIMILARITIES	DIFFERENCES	
Both groups	African-Americans n=13	Afro-Caribbeans n=12
<ul style="list-style-type: none"> Approximately half of African-American and Afro-Caribbean participants reported healthy current physical activity behaviors Healthy physical activity lifestyle important to women in both groups The same number of women in both groups were influenced by the norms of their childhood social environment The same number of participants in both groups were influenced by current social environmental norms—some healthy, some unhealthy Some participants in both groups were influenced by behaviors of both their childhood and current social environments Factors attributed by women in both groups for insufficient physical activity: (a) time constraints; (b) unavailability of exercise partner; (c) security concerns 	<ul style="list-style-type: none"> Some African-American participants changed from the unhealthy behaviors modeled during their childhood to healthier physical activity lifestyle because of health reasons African-Americans influenced by childhood norms practiced either healthy or unhealthy behaviors Current environment of African-Americans more influential toward healthy behaviors (than their childhood environment) 	<ul style="list-style-type: none"> Some Afro-Caribbeans not as active as they were in their childhood environments but others continued physically active lifestyle because they recognize the health benefits Afro-Caribbean participants influenced by childhood norms practices healthy behaviors Current environment of Afro-Caribbean participants more influential toward unhealthy behavior (than the childhood environments) Weather and difference in the U.S. versus the Caribbean regarding attitude toward driving versus walking

Behavioral norms within the social environment provide models for the learning of similar behaviors (Anderson-Bill et al., 2011). More specifically, SCT posits that social norms affect health related behaviors (Anderson et al., 2006, 2007; Bandura, 1998; Baranowski et al., 2002; Cullen, 2001; Phelan, 2009). It is not surprising then that the recent behaviors of

participants' resemble those modeled within their social environments. Previous research related to physical activity shows that African-American women who know other women that exercise are more likely to exercise (Wilbur, Chandler, Dancy, & Lee, 2003). This may partially explain why African-American women who grew up in childhood social environments in which physical activity was not modeled consistently or at all have recently changed to healthier behaviors; they are now involved with people in their current social environment who practice healthy physical activity behaviors.

Besides the influence of members of their social environments, participants' recent behaviors were also reported to be motivated by health reasons. Some African-Americans said that because of health reasons, they had changed from the unhealthy behaviors modeled during their childhood and were recently practicing more healthy behaviors. Although a few Afro-Caribbean were not as consistently involved in physical activity as they were when they were younger or as modeled by adults in their childhood environment, many of them said they continued being physically active because it was a way of life for them and because they recognized the health benefits to continuing this healthy lifestyle. So, whereas African-Americans changed from behaviors modeled during their childhood, to healthier behaviors, the Afro-Caribbean participants continued behaviors modeled during their childhood so they can remain healthy.

Despite some of the healthy behaviors modeled within participants' social environments, and their health concerns, women from both groups reported impediments to consistent physical activity behaviors. These impediments included time constraints, unavailability of an exercise partner, and security concerns. These findings (relative to African-American participants) were consistent with Joseph, Ainsworth, Keller, and Dodgson's (2015) review of the literature that

found lack of time and security were barriers to African-American women's physical activity. Bandura concurs that both access to safe physical environments and social support affect behavior (through self-efficacy) (Bandura, 1998). It is therefore understandable that these factors impede healthy physical activity behaviors for both sets of participants.

Because Afro-Caribbean participants seem to receive so much support and encouragement for, and modeling of, a healthy physical activity lifestyle, it is important to understand why some of these women have not maintained healthy behaviors in this regard. Motivation from within the social structure provides incentives toward agentic decisions relative to the reproduction of deeply rooted health habits (Bandura, 1998). The close communication ties of the Afro-Caribbean participants with family and friends who model healthy physical activity behaviors influence the current behaviors of study participants and the motivation to continue healthy physical activity lifestyles. Nevertheless, the challenges of time, weather, and concern about their physical safety remain issues that need to be addressed. Bandura (1998) notes that social support alone may not be sufficient to produce the required physical activity behaviors. So, although the Afro-Caribbean women received more encouragement toward physical activity behaviors, other factors mitigated regular exercise behavior. In addition to those named by both groups of women, Afro-Caribbean participants cited two additional impediments to consistent physical activity not mentioned by African-American participants. They indicated that the weather and the difference in the American culture—people driving everywhere they go instead of walking—made it difficult for them to continue behaviors that had become the norm for them.

In summary, the physical activity behaviors of participants in this study were consistent with those within their social environments. The behaviors of some participants were healthy and

for others, they were not healthy. Healthy physical activity behaviors among African-American participants were more consistent with those among members of their current social environments than with those among members of their childhood social environment; unhealthy behaviors were more consistent with those from their childhood social environments. Healthy physical activity behaviors of Afro-Caribbean participants were more similar to those of their childhood social environments than to those within their current social environments. All Afro-Caribbean women who reported behaviors similar to those from their childhood reported healthy behaviors; unhealthy behaviors were more consistent with those of their current social environments. Healthy physical activity behaviors of participants were also influenced by health concerns. Both groups of participants listed healthy physical activity lifestyle inhibitors, some of which were the same for both groups. Afro-Caribbean participants listed additional inhibitors. There are obvious associations between food-, physical activity-, and body image related attitudes and behaviors. To better understand these associations specifically among African-American and Afro-Caribbean participants, participants' recent body image-related attitudes were compared to those among members of their social environments.

5.3.3 Participants' recent body image-related attitudes

This section addresses the role of the social environments on the obesity-related attitudes of participants. The similarities and differences between African-American and Afro-Caribbean participants are summarized in Table 5.7. In this section, participants' obesity-related attitudes are compared with their reported attitudes of members of their social environments. Participants' healthy and unhealthy body image-related attitudes are discussed in relation to their childhood and current social environments and in relation to other factors that seem to influence their

attitudes. Participants' body ideals were indicated by their Stunkard figure choices and their comments about what was considered ideal.

SCT suggests that body image social norms will affect behaviors and attitudes. In this study, Afro-Caribbean participants' body ideal choices were more consistent with those of their social environments than were the choices of African-American participants. However, as was the case pertaining to the reported body ideals for participants' social environments, there was more variation in the choice of ideal body image among African-Americans than for Afro-Caribbean participants. African-American participants' choice from the Stunkard diagram ranged from figure number 3 to figure number 6; choices for what they perceived their social environments preferred ranged from figure number 1 to figure number 7. Afro-Caribbean participants chose figures that ranged from numbers 2 to 5 for both themselves and for what they perceived people in their social environments preferred.

Body ideal choices also varied among African-American participants based on where they grew up. In general, African-Americans from the North tended to choose smaller figures as ideal, while those from the South or those with parents from the South, tended to choose larger figures as ideal. On the other hand, Afro-Caribbean participants tended to choose the same or similar figures to represent the ideal body, regardless of the country in which they grew up.

There were some similarities and differences between both groups in terms of the meanings associated with body ideals. For both groups, what they considered "attractive" was expressed in terms of what the men preferred (e.g., "some meat," "something to hold"). Women from both groups also associated heavier bodies with older women; as they got older they expected to be heavier or thought they looked better with a little extra weight as they got older. African-American who grew up in the South and some who grew up in the West perceived the

ideal body, one that is “thick”—curvy, with a flat abdomen, and larger hips, legs and bust to be attractive and healthy. “Thin” body types were deemed healthier by other African-Americans who grew up in the West and those who grew up in the North (e.g., in coastal towns). For these women, slim symbolized health and beauty.

Table 5-7 Group similarities and differences - Social environment on body image-related attitudes and behaviors (RQ 6)

SIMILARITIES		DIFFERENCES	
Both groups	African-Americans n=13	Afro-Caribbeans n=12	
<ul style="list-style-type: none"> • Most women from both groups chose Stunkard figures representative of ideals within both childhood and current social environments • Both groups had two women who expected to be heavier as they got older or who thought they looked better with more weight now that they are older • Women from both groups reported the perception that the ideal body should include a flat stomach and a fuller derriere 	<ul style="list-style-type: none"> • More variation in choice of ideal image among African-American participants. • No African-Americans chose Stunkard diagram number 2 as ideal and few chose figures number 3. • Approximately half African-Americans chose Stunkard figure number 4 or 3-4 • Few African-Americans chose figure number 5 or 4-5 • One African-American participant chose figure number 6 • African-Americans from the North tended to choose smaller figures while those from the South, or with parents from the South tended to choose larger figures as ideal • Women who chose body ideals more consistent with their current social environment tended to choose smaller figures than those reported as the norms within their childhood environments • Current social environments seem to influence healthier body ideals among African-Americans 	<ul style="list-style-type: none"> • Little variation among Afro-Caribbean women in terms of their choice of the ideal image • Most chose Stunkard diagram number 2 or number 3 • Few Afro-Caribbean women chose 4 or 3-4 • One Afro-Caribbean chose 5 or 4-5 • No Afro-Caribbean chose figure number 6 • Choice of ideals among Afro-Caribbean was similar of the same regardless of where participants grew up • Childhood social environments seems to influence healthier body ideals among Afro-Caribbean participants 	

In the few instances where there were conflicting body image-related views within the social environment (i.e. between friends and family) of African-Americans, family ideals seemed to

carry a stronger influence for some, while, for others, the external social environment (friends) seemed to carry the stronger influence.

Also consistent with the social norms described were comments from both groups regarding the importance of proportionate parts of the female body. They explained that the abdominal area of the ideal body should be flat and with a fuller derriere. Additionally, Afro-Caribbean participants stated that they, themselves, may prefer smaller sizes, but also indicated that they may choose to be a little bigger “in the right areas” to please men. This is somewhat similar to Bewis’ (2011) finding that Jamaican women do not object to larger bodies, which are associated with sexuality. Interestingly, no participant referred to a link between health and waist size; waist circumference is used to estimate risk for diseases such as Type 2 Diabetes, high blood pressure, and coronary heart disease (CDC, 2015a). Instead, the desire for flat stomachs was based on what was deemed attractive.

The attitudes of participants who reported healthier body ideal perceptions (represented by the smaller figures on the Stunkard diagram) were consistent with different groups within their social environments. African-Americans who chose body ideals more consistent with those of their current social environments, tended to choose smaller figures than those reported as the norms within their childhood social environments. For Afro-Caribbean participants, however, healthier body image choices tended to be more consistent with their choices for members of their childhood social environments.

African-American women, in general, have resisted the ideal body image of the dominant (White) culture (Blixen, Singh, & Thacker, 2006; Hesse-Biber et al., 2004), portrayed in the media as thin (Halliwell, 2013). There have also been media portrayals of African-American women as a “mammy figure”—stout, or obese woman wearing a bandana on her head, and

purported to be associated with slavery. This is describes as one of the most persistent portrayals of Black women in the media (Fuller, 2001). Examples of symbolic modeling in the broadcast media sometimes serve to change normative practices and ultimately segments of society (Bandura, 1998). Exposure to the media and new friends have resulted in new knowledge and changing food and physical activity-related perspectives for some African-American women. In this study, whereas African-American women indicated that they did not want to be a slave to the scale, they also indicated that they did not want to look like the “Aunt Jemima” that is portrayed in the media. This study, like that of Hesse-Biber, Howling, Leavy, and Lovejoy (2004), found that for African-American women, the ideal body is “thick.”

The difference in body size attitudes between African-Americans and Afro-Caribbeans may be explained by factors related to the social norms within their respective social environments, communication and acculturation. For African-Americans, medium-sized bodies were the norm, whereas small to medium-sized bodies were the norm for Afro-Caribbeans. Afro-Caribbean participants reported receiving negative assessments from “back home” when they gained weight. This type of assessment, described by Bandura (2004) as an inhibitor to unhealthy behaviors, is consistent with Davidson and Knafel’s (2006) review. The other factor that may partially explain the difference in body image-related attitudes between African-American and Afro-Caribbean participants is that the effects of acculturation may not yet be evident in the Afro-Caribbean group because they have resided in the United States for less than ten years. Therefore, the body type that these participants consider ideal is likely to closely resemble the ideals “back home.”

In summary, the recent body image-related attitudes of Afro-Caribbean participants were more consistent than those of African-Americans in terms of the attitudes they reported for

members of their social environments. Body image choices among African-Americans were more varied than those of Afro-Caribbean participants. These variations may be attributable to the geographic regions where they grew up and the background of their parents. Healthier body image-related attitudes were more consistent with those among members of African-American's current, but Afro-Caribbean participants' childhood social environments. Finally, the differences between both groups of women may be due to (a) communication between Afro-Caribbean participants and their childhood social environment (which is healthier), and (b) Afro-Caribbean participants' not acculturating to the body image ideals presented by American culture, and (c) obesity-related norms within their social environments .

This section has examined the role of the social environment in participants' obesity-related behaviors. Comparing these roles between African-American and Afro-Caribbean participants provides bases for decisions regarding the development of obesity-related messages for the two groups. The next section addresses the implications of those findings.

5.4 Implications of findings for message design and dissemination

Previous research has suggested that health communication messages that are tailored to specific groups are more effective than those for a more generic mass audience (Kreuter et al., 2003; Kreuter & McClure, 2004; Resnicow et al., 1999;). The mass audience may be segmented in a number of ways, such as by demographics, culture, knowledge, etc. (CDC, 2010). Obesity-related messages for African-Americans have typically treated this audience segment as homogeneous (Phelan, 2009), but researchers have suggested further segmentation based upon culture may be necessary to improve message effectiveness (Phelan, 2009). This study found both similarities and differences between women identifying as African-American and those identifying as Afro-Caribbean living in Atlanta, GA. In this section, the implications for message

design and dissemination are discussed. First, since research suggests that recognizing the differences between African-Americans and Afro-Caribbeans may lead to more efficient messages, tailored to each group, suggestions are made regarding how messages should be targeted to each group based on the findings of this study. Second, recognizing that costs and economies of scale often make segmentation difficult or prohibitive, additional suggestions are made for developing undifferentiated messages.

5.4.1 Message Design Implications for Segmenting the Audiences

Being aware of group differences is important for successful tailoring of health-related messages (Archibald, 2011). Acknowledging the cultural differences in behaviors and in what is revealed regarding the “why” of behaviors symbolizes an appreciation of lived experiences. This facilitates the development of contextualized health-related messages, thus enhanced message salience to the target group (Baezconde-Garbanati & Boley Cruz, 2015). In this section, the differences in food-, physical activity-, and body image-related attitudes and behaviors of the African-American and Afro-Caribbean participants are discussed in relation to the design and dissemination of effective and efficient obesity-related program development.

This study found that, compared to African-American participants, Afro-Caribbean participants were a more homogeneous group in terms of food-, physical activity-, and body image-related social norms in their childhood and current social environments, and also in terms of their own health-related attitudes and behaviors. Having more homogeneous groups is more desirable for the development of health messages. Messages are more likely to be effective because the same message appeals to the maximum number of people and messages can be simpler and therefore more effective (Kreuter & McClure, 2004). Differences between the Afro-Caribbeans and the African-Americans in this study have potential implications for, and support,

the recommendation of Di Noia et al. (2009) and Komesaroff and Thomas (2007) to use differentiated obesity-related health messages for reaching the two groups.

It is useful to segment in certain circumstances. These include situations where (a) subgroups require different types of information or motivation to promote desired behaviors, (b) when subgroups are likely to identify with different spokespersons, (c) when there is a concern about a particular segment, (d) when there are indications that the lived experiences of various segments are different (Kreuter & McClure, 2004; O'Sullivan, Yonkier, Morgan, & Merritt, 2003). The findings of this study, discussed in detail below, fulfill all these circumstances. First, African-American and Afro-Caribbean participants have different food-, physical activity-, and body-image related norms. The interviews suggest different motivations (e.g., maintaining cultural traditions of their native countries versus changing behaviors for health reasons) for living a healthy lifestyle. They would also require different types of information (e.g., how to maintain healthy lifestyle in their current environment versus how to start living healthier). Second, these participants are from different cultural backgrounds and are therefore likely to identify with spokespersons that more closely resemble their respective culture (Kreuter & McClure, 2004). Third, literature has highlighted particular concern for the health of immigrants (Goel et al., 2004; Yang et al., 2012). Due to the effects of acculturation the health status of immigrants gets progressively worse after ten years of living in the United States, and is said to be worse than that of their counterparts with whom they were compared when they first came to the United States. Fourth, this study revealed that the lived experiences related to obesity are different. Afro-Caribbeans come from a different cultural background and they live as immigrants, settling into a new country with different traditions related to food and physical activity. For example, the women noted the availability of fast food and lack of traditional foods,

and differences in the walkability of their current neighborhoods compared to their home country. Their experience of life in the United States will be different from African-Americans for those reasons. Additionally, because they are starting life in a new situation, meeting new people from different cultures, they may not yet have established themselves financially and otherwise and so may be in a transitory phase for a while.

Based on the findings of this study, it is recommended that public health practitioners segment the “Black” audience and create differentiated obesity-related messages for African-American and Afro-Caribbean subgroups. Cultural segmentation helps address the variability in the socio-cultural factors that contribute to obesity among segments of the population (Coeril, 2009; Komesaroff & Thomas, 2007; Rimer & Kreuter, 2006) and can improve cultural appropriateness, relevance and persuasiveness of messages tailored to target groups (Kreuter et al., 2003; Kreuter & Haughton, 2006; Resnikow et al., 1999). Of course, the recommendation for segmentation is based on the assumption that where segmentation is attempted, there is a mechanism in place to gather data for the evaluation of any segmentation program. This study employed a deep structure approach to identifying and understanding the socio-cultural factors that affect how both groups of participants perceive and act on obesity-related attitudes and behaviors (Resnicow et al., 1999). Kreuter and McClure (2004) suggest that once the audience segments have been defined, descriptive profiles should be created for each group. The following sections providing information about segmenting for the two groups are organized around the three more modifiable elements of McGuire’s communication /persuasion model—channel, source, and message (Kreuter & McClure, 2004).

5.4.1.1 Message channels

Despite not asking directly about what communication channels would be most effective, participants' responses to the questions did provide some insight into ways that they may be reached with health messages. These options are therefore discussed with the caveat that there may be more effective channels for communication outreach. The channel(s) that is(are) used for delivery of a message can influence the effectiveness of the message (Rimer & Kreuter, 2006). The goal is to consider the attributes of channel options and select the optimal option(s) or combination of options for message delivery. Channel attributes to be considered include level of interactivity and reach to the audience (Rimer, & Kreuter, 2006).

African-Americans. This study found that both groups of participants used numerous types of technology and social media tools for communication with members of their social environments. Research indicates that African-Americans are among the fastest growing users of social media technologies and they are more likely than Whites to have a profile on a social networking site and to use status updating services such as Twitter (Pew Research 2009). Because of the prevalence of obesity among African-Americans it is imperative that they are reached with effective health messaging. In this study, African-American participants reported that they communicate with members of their social environments through cell phones, texting, Facebook, emailing, and Skype. The use of these devices and applications provides opportunities for reaching participants beyond the use of mass media channels. Frequent use of these channels by African-American audience members make them suitable for dissemination of obesity-related messages and for two-way engagement between audience members and practitioners (Gold et al., 2012). The CDC (2011b) supports the use of mobile technologies for health promotion based on

their characteristics of simplicity of use, immediacy in terms of the delivery of content, and context—delivering services relevant to individual’s needs and location.

Social media channels can be tremendously beneficial to public health practitioners in a number of ways. First, they provide opportunities for public health practitioners to employ segmenting and prioritizing strategies, which help to improve reach and enhance relevance of messages. For example, practitioners may choose to disseminate different messages to African-Americans who receive social support for a consistent physical activity and those who do not receive support for this type of lifestyle. Second, practitioners can capitalize on the frequency with which social media is used by this audience to leverage community engagement (Heldman, Schindelar, & Weaver, 2013). Important health-related messages can be disseminated to users who will most likely pass these along or publicize them to their acquaintances who also use social media. For example, African-Americans who may have made a change to a healthier lifestyle may provide tips or pass along other health-related messages to family members who still eat the unhealthy food from their childhood. Such persons may be more open to considering a message from someone they know and trust, than from a stranger. This is a potential means for generating interest and keeping the audience engaged (Gold, 2012). Third, not only are social media useful in the dissemination of public health messages to and among audience members, but it is recommended that public health professionals endeavor to incorporate into communication objectives, certain principles that facilitate listening to the conversations on social media and engaging with influencers and their conversations (Heldman et al., 2013). Fourth, social media can be incorporated into administering, monitoring and evaluating effectiveness of messages/intervention. Facebook, for example, has been used to generate immediate (and daily) results on the number of interactions by monitoring the number of ‘likes’,

wall posts and comments (Gold et al., 2012). Practitioners may choose to use social media as a means of collecting feedback in relation to self-reported behavior change and health, outlook, and life responses to health messages (Washington & Center for Social Impact Communication, 2010). The widespread use of social media by African-Americans, therefore, provides an automatic channel for access to updated information from audience members and for disseminating and evaluating customized programs to sub-segments based on demographic, psychographic, or other variables.

African-Americans in this study also reported that their faith was important to them. Other studies (e.g., Di Noia et al., 2009) also found that spirituality is important to African-Americans. This provides opportunity for churches to be incorporated as a channel through which obesity-related messages are disseminated to African-Americans. Churches and similar faith-based organizations have increasingly been used in health promotion. Reasons that have been offered for including churches in health promotions include the fact that they have physical resources needed for implementing programs and they also have direct contact with the people who worship in their facilities (Campbell, Hudson, Resnikow, Blakeney, Paxton, & Baskin, 2007).

Afro-Caribbeans. In addition to the devices and technologies used by African-Americans, Afro-Caribbean participants used other audio-visual communication channels, such as WhatsApp and Tango for communicating with close family and friends. WhatsApp is used for texting and calling internationally, whereas Tango is used primarily for video chats, photo-sharing and texting. Additionally, participants reported that they use the same phone plans and devices (e.g., iPhones) so that they can reduce the challenges associated with trying to communicate through technologies that are not completely compatible with each other.

Recommendations for channels to reach Afro-Caribbean immigrant audiences are three-fold. First, social media may be used to gather information regarding some of the challenges faced by immigrants. WhatsApp and Tango, however, could be used for the placement of health-related messages specific to immigrants. Finally, obesity-related messages may be disseminated through community based programs that promote food from their culture, highlight places where familiar Caribbean foods are sold, and promote Caribbean cuisine. Other studies (e.g., Wieland et al., 2011) have demonstrated the effectiveness of delivering interventions for immigrants through a community-based participatory research approach. This could be applied to the Afro-Caribbean population. Members of this group can be included in focus group discussions to help design messages for dissemination among members of the community where they reside.

5.4.1.2 *Message source.*

Planning decisions regarding message source considers “who” the audience will perceive as credible for the delivery of the message. Credible sources are perceived by the audience as believable; they possess expertise (competence) and trustworthiness (personal character) (O’Keefe, 2002). Persons who are considered to be experts and who are trustworthy are usually more persuasive and therefore more likely to elicit desired behavior changes. According to Kreuter and McClure (2004), the sources perceived as similar to the audience in terms of their backgrounds and shared cultural interests and beliefs also play a role in persuasion. Depictions of cultural similarity in the message source (relative to audience members) are therefore also important (Kreuter & McClure, 2004).

African-Americans. African-Americans seem to be influenced more by friends and members of their current social environment than by members of their childhood social environments. Based on these findings and their reports on the most important aspect of their

identity, it is recommended that messages targeting these women should portray family, individuals who are mothers, professional women, and women of faith. Messages in which the source of health information induces trust (as in fellow-moms) are perceived as more credible (O'Keefe, 2002). Also, a source that is tailored to the demographic and cultural characteristics of the audience may be perceived as more like the audience members. These messages are likely to produce better outcomes because audience members are likely to rate these sources as relatable and more concerned about them (Rimer & Kreuter, 2006).

Culturally appropriate strategies must consider the influence of social networks (Ashida et al., 2012). Incorporating members of the social environments and acknowledging support from influencers validates social norms as potentially helpful (Wills, Crichton, Lorenc, & Kelly, 2014). It also makes sense, therefore, that members of the current social environment of African-Americans (those that influence them toward healthier behaviors) would be incorporated in programs targeted to this segment of the population to encourage the maintenance of healthy behaviors, or in generating change, where needed. Programs targeting this segment of the population should incorporate persons who symbolize members of their current social environment, who model healthy physical activity lifestyles, and who exemplify the difference that lifestyle has made in their own lives.

Message sources for African-Americans should also reflect the body image ideals of African-American women. Because of the variety of body sizes that the African-American women in this study claimed to be ideal for themselves and members of their social environments, interventions or messages may depict a variety of body types, but not to the extent that some of them look obviously unhealthy.

Afro-Caribbeans. As with recommendations for African-Americans, it is important to validate and incorporate helpful influences as message sources (Wills et al., 2014). This study found that members of the childhood social environment seem to be positive influences on obesity-related behaviors of Afro-Caribbean immigrants. If further research is consistent with this finding, then incorporating members of the childhood social environments for obesity-related messages for Afro-Caribbean immigrants may be helpful in encouraging healthy behaviors. Doing so will help members of the Afro-Caribbean population identify with the source, increase cultural relevance, and enhance persuasion. For Afro-Caribbean participants who have been living in the United States for more than ten years (and therefore, for whom the acculturation process may be having negative health effects), messages could also incorporate reminders from members of their childhood social environments.

Afro-Caribbean identity is also important to decisions regarding message source. The participants in this study were relatively new residents in the United States. They have been living through the challenges of settling into a new culture and society. Message sources included in interventions tailored for Afro-Caribbeans should include depictions of immigrants, mothers, and women who are proud of their Caribbean identity. These depictions may help to enhance the credibility of the message by acting as indicators that the messenger understands the lived experiences, values and beliefs of the audience (Rimer & Kreuter, 2006).

Finally, participants chose body ideals that were depicted by smaller to medium sizes from the Stunkard diagram. They also reported similar body ideals for members of their social environments. To enhance the extent to which members of this group identify with the messenger, and thus the credibility of the message, it is recommended that bodies depicted in the

messages designed for Afro-Caribbean audiences should mirror the images chosen by these participants. They should therefore be small to medium sized and shapely.

5.4.1.3 Message content

Incorporating deep-structure characteristics in messages provides context, which enhances salience of the message to the audience (Kreuter & McClure, 2004; Resnicow et al., 1999). Culture influences health-related behaviors in a number of ways. One of those ways is through identity affiliations. These are affiliations with which an individual self-identifies and draws upon for beliefs, behaviors, norms, and values. Some identities may be more salient than others (Sha, 2006). Therefore, tailoring of health messages based on identity affiliations is effective only when those affiliations are very salient to the audience (Cho, 2012). Culture not only influences health-related behaviors through the identity affiliations, but also through cultural norms. These are discussed below. Below are recommendations for message content, based on the findings of this study relative to differences in the role of cultural norms in the attitudes and behaviors of African-American and Afro-Caribbean participants.

African-Americans. Based on the African-American women's reports that being a mother and member of their family, their faith, and profession were most important aspects of their identity, it is important that messages targeted to them acknowledge these as valuable to this group. Accordingly, messages targeted toward African-Americans may include content that depicts the benefits of healthy food-, physical activity-, and body image-related attitudes and behaviors for them and their families. These benefits may include the enhancement of their experience as mothers—e.g., being able to be more actively involved with their children and family members, being alive and healthy for important landmarks in the lives of their children, being less of a burden on their children as they (as parents) get older, etc. To increase salience,

messages may also incorporate the importance of faith in their lives, thus empowering them to live healthy lives by acknowledgements of how prayer and God can help in achieving a healthy lifestyle. Other studies have included similar content to acknowledge the cultural value of spirituality to African-American women (Kreuter & McClure, 2004).

The avowed identity is self-declared, as opposed to an identity that is ascribed by others to an individual (Sha, 2006). The difference between the two is illustrated in situations where African-American women who choose to change to healthier eating behaviors risk alienation because of their choice. These women, who once ate unhealthy Soul food now choose to depart from those norms, thus assuming a different avowed identity—one in which their health is more important. However, others in their social environments still ascribe the former identity to them and assert peer pressure to influence them to conform. In other words, in accepting Soul food choices as expressions of their African-American identity, members of their social environments may perceive any deviation from those choices as inconsistent with who they are. Thus, they may apply peer pressure for African-Americans to continue eating Soul food prepared in ways that reflect its historic significance. Messages designed for African-American women must acknowledge this challenge. As noted by Parker and Grinter (2014), even though food-related choices may be unhealthy, because of the meanings associated with cultural food choices, interventions aimed at persuading cultural groups to give up these practices may be met with resistance. Practitioners could capitalize on the desire of African-American women to be healthy and their apparent (based on the results of this study) adventurous disposition toward trying new foods. Messages designed for this group should therefore incorporate educational material about the health implications of continuing to eat Soul food prepared in unhealthy ways. African-Americans could also be encouraged to utilize healthier preparation methods for traditional Soul

foods as a way of keeping (modified) versions of traditional foods in their diets. Additionally, health programs may include educational components regarding alternative quick, easy cooking methods that produce tastes similar to those of Soul food but are healthier and still affordable. These include recipes to lower fat consumption. Examples of these are oven-fried fish and chicken instead of stove-top frying with oil, and replacing chicken thigh and skin with chicken breast when making chicken gumbo (Department of Health and Human Services, NIH, National Heart, Lung, and Blood Institute, Community Health Worker Health Disparities Initiative, n.d.)

Some of the African American women had changed their recent habits based on health and aging concerns and the influence of members of their current social environment. However, not all members of their current social environment modeled healthy behaviors. Both the healthy and unhealthy behaviors modeled and reinforced in the African-American social environments are expected to influence and produce like behaviors (Gaines & Turner, 2009). Messages to address these unhealthy behavioral models could highlight the role of enablers, which may be interpersonal (e.g., identifying social support for healthy behaviors), emotional (e.g., feeling attractive), cognitive (e.g., knowledge about the effects of the unhealthy lifestyle of their immediate and long term quality of life).

Message content that prioritizes physical activity is also indicated for African-Americans. The findings of this study suggested that an active lifestyle is not a priority among the social environments of many African-Americans; they mostly referred to the lack of consistent physical activity in their social environments as the norm. Perceived importance of the necessity for exercise is associated with healthy behavior (Affuso et al., 2011); therefore message content should portray African-American women who recently understood the importance of a consistently active lifestyle modeling physical activity in ways that create positive perceptions of

the behavior. This content can incorporate creative (low-cost or no-cost) unstructured fun family or group activities that raise the heart rate. Incorporating family or friends is important because they will be a source of encouragement for each other, and if they are able to fit these activities into their schedule, could change the social norms within their environments.

Studies have indicated that few programs have resulted in clinically meaningful weight loss outcomes for African-American women and that new strategies are necessary for the management of weight among these women (Bennett et al., 2013). Messages targeted toward African-American women should acknowledge that whereas they do not want to look like Aunt Jemima, they also do not want to be a “slave” to the scale. Since African-Americans are comfortable with a wide range of body sizes, the focus should be more about health than about body size. This recommendation is supported by Bennett et al. (2013) who have found that weight gain prevention, rather than a weight loss program, may be more advantageous for weight management and for preventing weight-related diseases in African-American women.

Afro-Caribbeans. One of the main differences between Afro-Caribbean and African-American participants is that whereas African-American participants reported that they wanted to live a healthier lifestyle, Afro-Caribbean participants reported that they strove to maintain the healthy lifestyle of their childhood social environments. Messages targeting Afro-Caribbean women could be designed around (a) their belief that obesity is attributable to individual choice; (b) pride they express in their nationality; (c) the importance of the food-related norms that were modeled in their childhood environments and the and the health value of eating the “Caribbean way,” and (d) their desire to preserve the healthy eating, physical activity, and other habits and pass these healthy habits down to the next generation. Program content designed for more recent immigrants could provide reminders regarding the importance of remaining healthy and

reinforcing the health values of food and physical activity norms of their childhood social environment, rather than the educational type of content suggested for African-Americans.

Although they generally try to maintain healthy lifestyles, barriers here in the United States have prevented some Afro-Caribbean participants from continuing the healthy lifestyle to which they were accustomed. In addition to encouraging recently immigrated Afro-Caribbean participants to continue healthy food- and physical activity-related lifestyles, messages must help them overcome their unique impediments. These include cooler weather that prevents them from being physically active. Messages could also suggest strategies to resist the culture around them where people are excessively reliant on motor vehicles and do little walking. Messages to encourage physical activity could include content that depicts both adults and children involved in sports and other forms of physical activity and where family members and friends walk together for some errands, such as going shopping (e.g., parking far from mall entrances and walking). This audience segment would easily relate to these depictions, which would be representative of the norms from their childhood (and, in some cases, current) social environments.

In summary, the study revealed numerous differences between African-American and Afro-Caribbean participants. Suggestions for differentiated message designs were based on differences related to identity affiliations, attitudinal and behavioral obesity-related social norms, healthy versus unhealthy social influences in their lives, social support toward healthy behaviors, peer pressure toward unhealthy behaviors, participants' perceptions of their childhood social norms and their recent attitudes and behaviors, and barriers to healthy food-, physical activity-, and body image-related, attitudes and behaviors. Recommendations for message sources, channels and content were based on these differences.

5.4.2 Messages Design Implications if Segmentation is Not Possible

Whereas public health researchers (such as Kreuter et al., 2003) have warned against race-based overgeneralizations in the development of health programs, they have also acknowledged that applying information about population sub-groups must be efficient at the population level; the “hypersegmentation approach” may be inefficient and “impractical” (Kreuter et al., 2003, p. 137). Where it would be impractical, inefficient, or too costly to design differentiated programs for African-American and Afro-Caribbean women, there is value in identifying and developing programs based on the similarities between these groups. These are, in effect, areas of shared salience. The discussion for undifferentiated programs for African-American and Afro-Caribbean women is presented in terms of the same program elements used for the discussions on differentiated programs—message channels, message source, and message content.

5.4.2.1 Message channels

This study found that women in both groups utilize a wide range of communication channels for keeping in touch with members of their social environments. Talking on the phone and texting were reported as the most frequently used channels of communication, but women from both groups also used Facebook, email and Skype. In addition to the uses of social media for the dissemination and collecting of differentiated obesity-related messages for African-Americans and Afro-Caribbeans, social media may also be used for undifferentiated programs. This would include using the technology commonly used by both groups to segment, reach, monitor and facilitate feedback from, African-Americans and Afro-Caribbeans, as a group. They can also be used for demographic and psychographic segmentation of obesity-related messages.

For example, messages targeting younger women who do not live a physically active lifestyle could be disseminated through social media channels most used by younger adults.

5.4.2.2 *Message source*

As discussed in the previous section, message sources should convey credibility and a sense that they can relate to the audience's real world experiences. The audience must perceive that the message source is similar in ways that are important to them (Kreuter & McClure, 2004). Women from both groups indicated that being a mother was most important to them. They also indicated that being healthy is important. Sources for messages targeted to both sets of women should therefore depict mothers who are healthy and who look like participants, physically. There was an overlap between African-American and Afro-Caribbean participants in terms of the body image ideal. Women presented in messages to them should therefore not be too small to be considered credible by African-Americans and should not be too large to be considered credible as "healthy" individuals by Afro-Caribbean members of the audience.

5.4.2.3 *Message content*

In addition to reporting that being a mom was the most important aspect of their identity, most participants in this study also expressed the beliefs that (a) obesity is a major problem in the United States, (b) African-Americans are disproportionately affected, and (c) parents and socio-economic status contribute to the problem. Obesity-related messages targeted to both groups simultaneously could utilize attention-getting and self-referencing strategies. Attention getting strategies could appeal to the importance of their identities as moms. Message content framed in this way is expected to get their attention because their role as mother is salient to them. Content that seeks to communicate to them as mothers is also likely to increase comprehension and recall of the message (Hawkins, Kreuter, Resnicow, Fishbein, & Dijkstra, 2008).

Self-referencing strategies are designed to encourage individuals to examine themselves to identify any discrepancies between their actual and ideal attitudes or behaviors (Hawkins et al., 2008). Self-referencing content would therefore encourage them to examine their own behaviors to evaluate whether they are healthy or whether they may lead to obesity. More specifically, program content could (a) address their stated perceptions that children are adversely affected by obesity due to the decisions and behaviors of their parents and (b) influence them to evaluate their own decisions in reference to ideal obesity-related lifestyle habits. This could possibly be accomplished by depicting a scene between two mothers where one of them (or a child) points out that the mother's behavior is not consistent with what she has taught her child. Also, since both groups are considered to be from collectivistic cultures, then program messages may be designed to help audience members focus on how their behaviors could ultimately adversely affect their family. These programs could also include content that educates audience members how to incorporate healthier physical activity and food-related behaviors for their children, even on limited family budgets.

Messages directed toward both groups could also draw a contrast between the active lifestyles of their youth and the sedentary lifestyle of children today. All participants stated that children in their childhood social environments were very active. Since both sets of participants reported that they believe that children today are affected by obesity, and that parents are, at least partially to be blamed, messages could highlight the sedentary lifestyle of children today (including less physical activity at school and time spent using electronic devices) and how parents can encourage active play. The goal of this content would be to persuade mothers (and other parent figures) to truly take responsibility for the obesity-related health of their children,

and to ensure that boys as well as girls are consistently involved in sufficient levels of fun physical activity.

To design programs for those who, because of factors related to the social environment, are not consistently involved in healthy physical activity and food-related behaviors, public health programs could draw on Bandura (1998), who argued that motivation from within the social structure incentivizes agentic decisions regarding health habits. These programs could appeal not just to individuals, but also to other members of their social environments encouraging them regarding the rewards and benefits of working together to plan lifestyle activities. Content should highlight key advantages associated with behavior change (e.g., consistent physical activity and healthy food-related lifestyles) (Schiavo, 2007), and highlight the impact of their current lifestyle habits on the future quality of life for them as individuals and as families.

Regarding body image, women from both groups expressed what was considered attractive in terms of men's perspectives. This included flat abdomens, shapely but proportionate body parts, and a fuller derriere. Although these women also said that they, themselves, perceived ideal bodies to be flat in the abdominal area and proportionate in terms of the body parts, they reported that they were also willing to maintain their body images based on men's preferences, some of whom they said preferred larger bodies. Messages targeting African-American and Afro-Caribbean women could be framed to appeal to factors that are important to them. For example, messages to elicit behaviors that help to reduce abdominal adiposity could be framed in terms of their desire to be attractive to men, rather than making reference to official recommendations for healthy waist circumference. Message design could capitalize on the preference for bodies with flat abdomens and encourage them to persist in lifestyle behaviors

(food- and physical activity-related choices) that would lead to that desired outcome. Messages must convey that this outcome would not only make them more appealing, but could also be an indicator of better health than if they had protruding abdomens, which may be evidence of unhealthy visceral fat. Because flat abdomens is something they already desire, they may be more receptive to body image-related messages that focus on this aspect of the body, rather than messages framed around weight loss.

Message content could also address the expectation that women would weigh more as they grew older. This could be done by acknowledging that this is normal. However, messages should also underscore the importance of living healthy lifestyles. The following content could be incorporated in messages to address the body-size expectations as women age: (a) As individuals age, they become more prone to chronic diseases, thus the need to slow down the aging process by healthy behaviors; and (b) although the prevalence of obesity in the general population has leveled off, it is higher (39.5%) in middle age adults, 40-59 years, than in younger adults (30.3%) and it has increased in adults 60 years and older (35.0%) (CDC, 2015b). These messages could also acknowledge and capitalize on the audience's desire to be healthy as they get older.

Finally, participants' claim that lack of time is an impediment to healthy behaviors may account for the lack of consistency between what they say they believe and their actual behavior. Other theories, such as the Health Belief Model (HBM) could be used as a framework for addressing these barriers. Participants must (a) recognize that they are overweight or obese or that they are at risk for obesity-related illnesses, (b) have an incentive (such as being healthy as they get older, or being healthy for their children), (c) accept that behavior modification will result in desired benefits, and that those benefits outweigh the time and effort (barriers), and (d)

believe that they are able to take the necessary action. Informational content may facilitate healthier behaviors. Messages could educate parents about (a) how to overcome time constraints and other impediments that challenge their behaviors relative to the desire to live healthy lifestyles, (b) how much at risk they may be because of racial, demographic, or psychographic factors. Persuasive message content could also remind them of, and highlight, the benefits that will be gained by individuals and their family.

In summary, the findings of this study indicated that, despite their many differences, African-American and Afro-Caribbean participants were similar in ways that allow for undifferentiated obesity-related messages. Similarities in some aspects of their identities, use of social media, and some social norms facilitated the discussion for undifferentiated approaches to obesity-related message design.

5.5 Limitations of the study

First, the findings of this qualitative study are not generalizable. A number of related factors contribute to this: (a) the findings are based on a small convenience sample of participants; (b) participation was limited to women who live in Atlanta, Georgia; and (c) many of the participants in the study were recruited based on fliers that were placed in communities where it was likely that Afro-Caribbean women would see the fliers. It is therefore expected that African-Americans who live in a different communities within Atlanta, and in other geographic area may have different reports related to obesity-related norms, attitudes, and behaviors. Additionally, people who live in rural areas may also have different obesity-related attitudes and behaviors, compared to those who live in urban areas.

The sample was also not representative of the women in Atlanta in terms of socio-economic status and other socio-economic factors. For example, whereas Atlanta is comprised of

a mix of people from a wide range of socio-economic groups, the African-American women in the sample for this study seemed to be in the middle to upper socio-economic classes.

Additionally, the socio-economic (and other demographic) make-up of residents of Atlanta may be different from that of residents in another city in the State or in a different region of the country. This is important because the overall composition of residents, relative to socio-economic status and other demographic factors, may influence the obesity-related norms.

Second, data were collected by depth interviews and are therefore subject to the limitations of this data collection technique. For example, a semi-structured interview guide was used for the interviews, therefore, flexibility was exercised in the order in which questions were asked. In general, this method can result in inconsistencies because all participants are not exposed to the questions in the same order. In this study, participants were allowed to elaborate when answering questions and data were allowed to evolve naturally, even if their responses addressed questions that were not yet presented to them in the discussions. This could have impacted the responses because each participant's answers may have been somewhat different if they were confined to answering questions in a particular order. Additionally, specific topics were raised by some participants and not by others. For example, some participants talked about the cultural origins of their parents, but other did not. As a results, information such as this was not available for all participants. Also, the high degree of interaction between participants and researcher during in-depth interviewing could have influenced participant's responses (this is generally expected in interviews of this type). Notwithstanding the researcher's mindfulness about this possibility, and the attempts that were made to be as consistent as possible in verbal and non-verbal interactions with, and reactions to, participants, interactions may have influenced participants in different ways. Furthermore, there may have been some level of subjectivity in

researcher's interpretation of data, despite the care to (a) distinguish between her own values and those of the participant, (b) put aside her own preconceived beliefs about the phenomenon under study, (c) maintain awareness of her subjectivity, personal assumptions, and views to help promote true understanding, (d) ask questions in a non-leading fashion, and (e) disclose her cultural background to participants.

The third limitation is related to the verifiability of participants' responses. Data collected from participants was based on self-reports with no triangulation or other means of verification. Participants' responses to questions and discussions about their attitudes, and behaviors were, in general, accepted as true, unless there were obvious inconsistencies in their responses; the study did not utilize measures from which internal consistency of constructs could be estimated. Also, although most of the studies were conducted at neutral locations, a few were conducted at the homes of participants, mainly for their convenience. In three cases, there were other people at home during the interview. There was no way to verify whether some questions may have been answered in different ways if participants were completely alone with the researcher. This may have been particularly germane in situations where questions related to members of participants' social environments. The researcher was aware of this possible influence and therefore was on the lookout for any instances of apparent discomfort or change in participants' composure so that such questions could be asked at a time when other residents in the home were not within earshot; this is a limitation to the extent that the researcher may not have been aware of participant's discomfort.

Fourth, because the researcher talked with study participants about her familiarity with the Afro-Caribbean culture, African-American participants may not have felt equally at ease and free (compared to Afro-Caribbeans) to share information and talk with the researcher. Also, the

researcher's interpretation of data from Afro-Caribbean participants may have been more natural, requiring less need for clarification during the data collection and coding processes. The researcher did, however, take steps during interview sessions to seek clarification and confirm the meanings of terms, etc., with which she was less familiar.

Finally, the study was also limited because it was designed for a focus on the social environment in relation to social cognitive theory. The physical environment, for example, was not included in the study. The results of this study indicate that the physical environment is an important element in studying obesity-related attitudes and behaviors. The physical environment has implications for access to healthy foods and safe, walkable environments to encourage physical activity.

Overall, the findings of this study were limited by virtue of the type of research, the sample, and the data collection method. Accordingly, there are no findings regarding, among other things, (a) the generalizability of the findings to African-Americans and Afro-Caribbean immigrant women in the general population within Atlanta and other areas of the country, (b) communication norms among African-American and Afro-Caribbean women, in general, (c) the role of the social environment on the obesity-related attitudes and behaviors of immigrants of other ethnicities and from other countries (outside the Caribbean). Additionally, other elements, such as the physical environment, that affect obesity-related attitudes and behaviors were not included in this study.

5.6 Future research

This study found some similarities and differences in obesity-related beliefs and behaviors of Afro-Caribbean immigrant and African-Americans in Atlanta. The theoretical and practical findings of this study may be enriched by future studies that are designed to (a) explore

the generalizability of the findings of this current study to the general population, (b) compare the findings relative to Afro-Caribbean immigrants with those of other immigrant groups in the United States, and (c) gain additional information to enhance the design of relevant obesity-related messages.

5.6.1 *Generalizability of findings*

In order to determine whether the findings of this study are significant enough to warrant differentiated or undifferentiated message designs for the larger population, quantitative studies are required. These studies should be designed to capture the extent to which the similarities and differences revealed in this study are also true in population samples that are representative of the groups from which they are taken geographically and demographically.

Geographic generalizability. These should include representative samples that (a) compare African-American women and Afro-Caribbean women living in Atlanta, Georgia, (b) study women from both groups that live in rural versus urban areas in Georgia, and (c) compare women from both groups who live in Atlanta, with those who live in other urban regions of the country. These studies should explore generalizability with respect to identity, beliefs, social norms, food-, physical activity-, and body image-related attitudes and behaviors of participants. Studies should also explore inhibitors to healthy behaviors that may exist among women within all subgroups.

Additional demographic generalizability. Future studies should also be designed to ascertain whether the findings relative to identity, beliefs, social attitudinal and behavioral norms, and inhibitors to healthy behaviors are dependent on other demographic factors such as socio-economic status and age. These studies should be designed for both Afro-Caribbean and African-American women. One aspect of socio-economic status that was highlighted in this

study was brought out by African-American participants. In discussing attributions of obesity in the United States, these participants indicated that easy access to cheap, unhealthy fast food is partly to be blamed. They frequently referred to these attributions as if others, as opposed to themselves, had fallen victim to the ills of fast food. Additional studies are therefore needed to ascertain the extent to which there is a perceived third-person effect (Davidson, 1983) in relation to consumption of easily accessible, cheap, unhealthy fast food and the implications of this effect for the design of messages to reduce fast food consumption.

5.6.2 *Different immigrant groups*

This study revealed numerous obesity-related differences between African-Americans and Afro-Caribbean immigrants. These differences formed the bases for the recommendation of differentiated messages for African-American and Afro-Caribbean participants. Some recommendations were related to unique circumstances of Afro-Caribbean participants as immigrants. Additional studies are needed to clarify whether the findings of this study are applicable to other immigrants from the Caribbean region and from other countries or regions of the world.

Acculturation. Literature is replete with studies about acculturation. However, a fair amount of work related to this area has focused on Hispanic immigrants, and little work has been done in this area relative to Afro-Caribbean immigrants. This study was undertaken in part because the literature indicates that after approximately ten years, immigrants in general start exhibiting declining health outcomes. The assumption was therefore made that these findings may be true of Afro-Caribbean immigrants from English-speaking countries. Additional research is needed to verify this and to compare the effect of socio-demographic factors on acculturation, body image attitudes, and obesity-related attitudes and behaviors among Afro-Caribbean and

other immigrants. This is needed to ascertain whether immigrants from various regions acculturate at the same pace, and whether they acculturate in the areas of obesity-related attitudes and behaviors. Such findings may be helpful in designing targeted and relevant obesity-related messages for various immigrant populations in the United States.

Enculturation. Research is also needed to ascertain the behaviors that are developed among Afro-Caribbean and other immigrant groups as a result of enculturation. These are new ideas and practices that immigrants learn from other groups. This study found that some Afro-Caribbean participants do adopt some behaviors (e.g., food preparation methods) of the new culture. Immigrants then fuse those new cultures with their own (Zimmerman, Ramirez-Valles, Washienko, & Walter, 1996). The idea behind suggestion research in this area is for the identification of unhealthy behaviors and to garner ideas for healthy obesity-related behaviors that may be promoted to others in differentiated or undifferentiated messages.

5.6.3 Additional information

Additional theory-related and practical information is also needed for the design of more precise messages. Consistent with SCT, this study indicated that the social environments of African-American and Afro-Caribbean immigrant women played roles in participants' obesity-related attitudes and behaviors. In some instances, participants' behaviors were very consistent with those of childhood and/or current members of their social environments and in other instances, they were less consistent or different. This applied to healthy and unhealthy behaviors. Further research is needed to examine possible differences in the roles of the childhood social environments and current social environments on the attitudes and behaviors of African-American women and women who have immigrated to the United States from the Caribbean and from other countries. Studies on childhood environments should explore ways in which parental

background affects the obesity-related attitudes and behaviors of both African-American and Afro-Caribbean immigrants. In this study, some participants introduced unsolicited information about the background of their parents. They also talked about the matrilineal effect on their own food-related behaviors. Since parental these topics were not included as in the discussion guide, the information was not available for all participants. Further studies should also seek to identify and understand factors within the childhood and current social environments that promote healthy and unhealthy attitudes and behaviors. These findings will have implications for the development of culturally sensitive messages among members of the various population sub-groups.

SCT also espouses the role of impediments to healthy behaviors. Where impediments exist, the modeling of healthy attitudes and behaviors may be insufficient for the imitation of those behaviors. Research is also needed to ascertain additional strategies (besides those which include the social environments, discussed above) that would be effective to help African-American and Afro-Caribbean and other immigrant women overcome the impediments (e.g., time constraints, concerns about access to healthy foods and safe physical environments) to healthy behaviors.

In studying these impediments, researchers should also design studies to ascertain how impediments may differ based on geographic, demographic, and cultural factors. In this study, one participant discussed major differences between the geographic area in which she lives and that of her cousin. She lives in an area where most people are fat and they eat a lot of unhealthy fast foods because that is what is available and affordable. In addition to this, they do not exercise and are not physically active because there are no facilities for exercising and walking. By contrast, her cousin lives in another community (within Metro Atlanta) where there are

different perceptions of body norms and lifestyles. Residents “work out’ regularly in the many gyms and walkable streets in the community, and they have ready access to healthy food. She reported that, in general, healthy behaviors are modeled throughout the community. Whereas this study was designed around social cognitive theory, other studies may be designed around other theories, such as social comparison theory, to further examine the role of social environments on obesity-related behaviors.

In addition to exploring social cognitive and other theory-related information, future studies should seek to understand additional factors related to the practical aspects of message development. No message design recommendations were made for program formats because that was not the focus of the study. However, cultural differences between the African-American and Afro-Caribbean women may result in different outcomes from messages. These outcomes may be based, not on content, but on message format. Further studies are needed to identify the program formats (such as storytelling) that work best for African-Americans versus Afro-Caribbean women. Also, discussions about channels for message dissemination were limited to the findings of this study and dealt mainly with social media. Research is also needed, therefore, to ascertain the best channels for program delivery or message dissemination for these sub-groups. This would also help in determining more effective and efficient dissemination strategies. Furthermore, this study inquired only about the aspect of participants’ identities that was most important to them. Vardeman-Winter et al. (2013) state that women make decisions based on multiple identities. They also warn that ignoring intersections of those identities could result in the rejection of health messages. Future research is needed to identify the salient identities of African-American and Afro-Caribbean women to ensure that they are considered in

designing health messages. This is expected to improve the relevance of messages targeting women in these groups.

5.7 Conclusion

The overarching goal of this study was to ascertain the role of culture in the obesity-related attitudinal and behavioral similarities and differences between African-American women and Afro-Caribbean immigrant women who have been living in the U.S. for no more than eight years. In-depth interviews, facilitated through discussion guides, produced themes that revealed important food-, physical activity- and body image-related similarities and differences in attitudes and behaviors perpetuated by sociocultural norms. The formative findings provide bases for quantitative studies to examine generalizability. They also support the argument for cultural segmentation of health-related messages in general, and for cultural segmentation within the African-American population in particular. There is, therefore, sufficient support for developing culturally relevant obesity-related messages for Afro-Caribbeans as a separate subgroup of the African-American/Black population in the U.S. However, the study also revealed sufficient similarities between the two groups to support an argument for undifferentiated culturally relevant obesity related messages targeted to both groups simultaneously when segmenting the audience is not possible.

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APPENDICES

Appendix A: FLYER

**Afro-Caribbean Immigrant Women
&
African-American Women**

**Participate in a Georgia State University
Research Study on
Health & Lifestyle Attitudes and Behaviors**

WE WOULD LIKE TO INTERVIEW YOU IF

- ◊ You live in the Atlanta Metropolitan area and...
- ◊ You are an Afro-Caribbean who immigrated from an English-speaking Caribbean-country after 2005, OR you are African-American and you were born and raised in the U.S., and ...
- ◊ You are between 18 and 65 years old

EARN A \$25 GIFT CARD

If you are interested in participating, call : MELANY @ 770-742-8872
INTERVIEW TIME IS APPROXIMATELY 2 HOURS

Other age, please state: _____

[If they meet the criteria and are part of a group that I have not reached the quota for, then]: Thank you. I would like to try to set up a time to talk to you.

[If not, then]: Unfortunately, I am no longer looking for women who are [insert reason]. If you know someone who is {insert what you are still looking for} would you ask her to contact me? I appreciate you taking the time to talk to me.

Appendix C: Informed Consent Form

Georgia State
University
Department of
Communication
Informed
Consent

Title: *Exploring the Health and Lifestyle Attitudes and Behaviors of African-American Women and Afro-Caribbean Immigrant Women in Atlanta, Georgia*

Principal Investigator: Dr. Holley Wilkin (PI)
Co-Investigator: Melany Chambers (Student PI)

I. Purpose:

You are invited to participate in a research study. The purpose of the study is to understand health and lifestyles behaviors of women, who live in Atlanta, Georgia. You are invited to participate in an interview because you are either a female Afro-Caribbean immigrant or an African-American woman. We will recruit between 24 and 32 women for this study. There will be one interview. The interview will last between one and a half to two hours of your time. The study begins on September 15, 2014.

II. Procedures:

If you decide to be a part of this study, you will be asked to do an interview with the researcher. The interview will take place in a location that is convenient to you and the researcher. We can choose a public place, like a coffee shop, where we can talk without too many distractions. The discussion will last no longer than one and a half to two (1 ½ - 2) hours and you will be compensated with a \$25 gift card. If you decide to withdraw early, your compensation will be prorated based on the time you remained in the discussion.

III. Risks:

In this study, you will not have any more risks than you would in a normal day of life.

IV. Benefits:

Participation in this study may benefit you personally. Your input may contribute to the development of future health messages for women. Overall, we hope to understand health and lifestyle decisions made by women living in the state of Georgia.

V. Voluntary Participation and Withdrawal:

Participation in research is voluntary. You do not have to be in this study. If you decide to be in the study and change your mind, then you have the right to drop out at any time. You may decline to answer specific questions or stop participating completely at any time. Whatever you decide, you will not lose benefits to which you are otherwise entitled.

VI. Confidentiality:

We will keep your records private to the extent allowed by law. Principal Investigator (PI), Dr. Holley Wilkin, and Student PI, Melany Chambers will have access to the information you provide. Information may also be shared with those who make sure the study is done correctly (GSU Institutional Review Board, the Office for Human Research Protection (OHRP)). We will not use your name on study records. Instead, we will use a code name or number, such as DISS_01_MC. The audio-recorded information you provide and notes taken during interviews will be stored in a locked cabinet at Georgia State University. Data will be transcribed by the Student PI. This data will be stored on a computer, protected by firewall and password. Code sheets used to identify research participants will be stored separately from the initial intake survey form. Code sheets will also be kept separate from data to protect the privacy of participants. The key to the cabinet that stores assigned code numbers will be kept separately from the data. This will also help to protect the privacy of participants. Your name and other facts that might point to you will not appear when we present this study or publish its results. Audio- recordings will be destroyed within two-years of data collection. The findings will be reported in group form. You will not be identified personally.

VII. Contact Persons:

If you have questions, concerns, or complaints about this study, there are some people you may contact. Dr. Holley Wilkin's telephone is 404-413-5657. Her email address is: hwilkin@gsu.edu. You may also contact Melany Chambers at 404-413-5600. Her email address is mchambers9@gsu.edu. You may also call if you think you have been harmed by the study. If you want to talk to someone who is not part of the study team, you may call Susan Vogtner. She is in the Georgia State University Office of Research

Integrity. Her telephone number is 404-413-3513 and her email address is svogtner1@gsu.edu. You can talk about questions, or concerns. You may also offer input, obtain information, or make suggestions about the study. You can also call Susan Vogtner if you have questions or concerns about your rights in this study.

VIII. Copy of Consent
Form to Subject:

We will give you a copy of this consent form to keep.

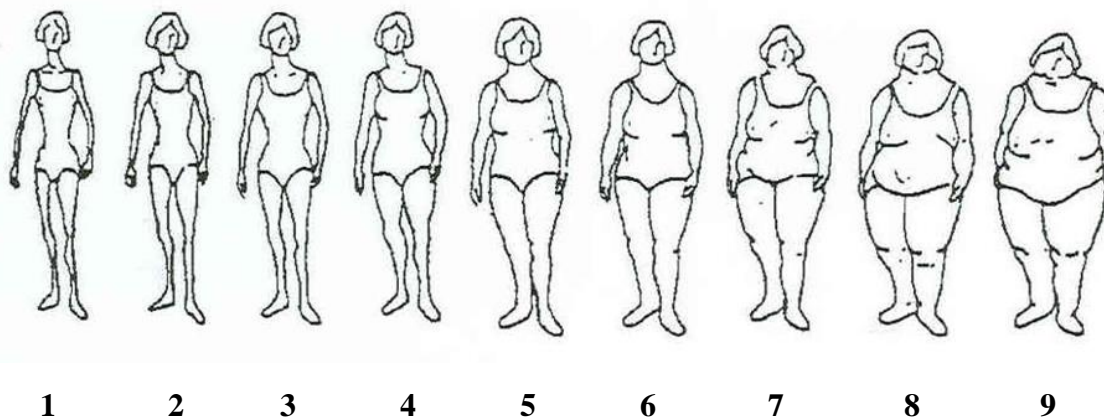
If you are willing to volunteer for this research and be audio recorded, please sign below.

Participant

Date

Principal Investigator or Researcher Obtaining Consent

Date

Appendix D: DIAGRAM TO BE USED FOR BODY SIZE QUESTIONS**Stunkard Adult Female**

Stunkard, A.J., Sorenson, T. & Schulsinger, F. (1983). Use of the Danish adoption register for the study of obesity and thinness. *Research Publications - Association for Research in Nervous and Mental Disease*, 60, 115-120.

Appendix E.1: DISCUSSION GUIDE: Organized Around SCT Elements

- This discussion guide lists all the questions, arranged according to SCT concepts. There are two versions to some questions. One version for Afro-Caribbeans and the other for African-Americans, as follows:
 - Questions coded A/C will be discussed with Afro-Caribbean women
 - Questions coded A/A will be discussed with African-American women
- Other questions, designated “both,” will be discussed with both groups, Afro-Caribbeans and African-Americans.
- Responses to all body size-related questions will be facilitated asking participant to choose a body type from diagram in Appendix C.

Exploring the Health and Lifestyle Attitudes and Behaviors of African-American Women and Afro-Caribbean Immigrant Women in Metro Atlanta, Georgia

SOCIAL ENVIRONMENT

Current close family and friends

Both Tell me about the people that you are closest to...who are they? Where do they live? How do you keep in touch with them? (Probe for method of communication – skype, social media, phone, in-person) And, can you talk a little about how much contact you have with them? [Probe for information about family and friends from home, if not mentioned, frequency, duration etc.][Probe also for extent of, and means of, contact with people back home]

Health

Both Who among your family (including significant other) and friends do you most like to be like? Tell me a little more about [insert name]. Why do you admire them/go to them for advice? Where do they live? Tell me about [insert name]’s lifestyle and attitude toward health. [If necessary probe for diet and physical activity, and health attitudes and behaviors]

Both I am interested in understanding the role that family and close friends plays in your health decisions. Think about current closest family and friends that influence you; can you talk about what “being healthy” means to them, what they do to keep healthy, etc., and also talk about what being healthy means to you? [*If necessary, prompt: Does it have anything to do with how one looks, feels, etc.?*]

Both Have you ever decided to do something to improve your health or had a doctor tell you that you needed to do something like walking more, exercising, changing what foods you eat? [*If yes, then ask*]: When was this? Tell me how the closest people (your significant other, family and friends) in your life reacted. [*Probe, if needed:*] Has anyone said or done something that stands out to you? Tell me about it.

Body size/Values/Attitudes/Norms [*Ask these questions choosing from persons named above, as current closest family and friends*].

Both What would your significant other and closest family and friends [*specify according to close friend, family referenced above*] say is the best weight/body size for a woman your age and height? Would you take a look at this chart and indicate which figure you think they would choose as the best figure for you? What about people who are bigger and smaller than your size – how do you think your close friends and family here (in the U.S.) would feel about those people?

- Diet

A/C Tell me about the types of food and drink they [*closest family and friends here in the U.S.*] normally have? What is their favorite meal? How is it prepared? Is this similar to how food was prepared in the Caribbean?]

A/A Tell me about the types of food and drink they [*closest family and friends here*] normally have? What is their favorite meal? How is it prepared? Is it similar to how food was prepared where you grew up?

- Physical activity

Both How do your current closest friends and family members feel about exercising? Do they have the same beliefs about men and women exercising? Is this how most people of your culture feel about physical activity or is this just your family and friends?

Both What, if anything, do they do to be physically active?

Family and friends of origin

Values/Attitudes/Norms

- Health

A/C Think about family and friends that influenced you as you were growing up in the Caribbean; can you talk about what “being healthy” meant to them? [*If necessary, prompt: Does it have anything to do with how one looks, feels, etc.?*]

A/A Think about family and friends that influenced you as you were growing up; can you talk about what “being healthy” meant to them? [*If necessary, prompt: Does it have anything to do with how one looks, feels, etc.?*]

- Diet

Both Can you tell me a little about yourself in terms of where you lived when you were growing up? What are some of the foods that you remember eating? Was that typical of people living in [*insert place*]? How were foods typically prepared in your home and by others in your culture? [*probe for details, if necessary, who cooked? How did they prepare the food?*]

To what extent have you incorporated those kinds of foods [*from family of origin*] into your life in Atlanta? Can you tell me about it?

Both What role did food play within your family back home? [*If needed, prompt: “For example, did your family get together for meals daily?” “Who ate together?” “Were there certain kinds of foods for certain occasions?” “What about the extended family, did you all get together often?” “How often?” “What kinds of foods were served?”*]

- Physical activity

Both How active were people (in general) where you grew up [*insert place*]? What sort of things did they do to keep active? [*Prompt, if needed: Did people walk a lot? Or, did you see a lot of people riding bicycles, running, dancing, etc. How often?*] What about your own family? How did they feel about physical activity? How important was exercising or physical activity? What sort of attitudes did people have toward exercising?

- Size

- Both** What kinds of meanings did people in *[insert place where grew up]* associate with body size or shape when you were growing up? *[If necessary, probe: Are certain sizes considered “healthier” or “sexier” or “more attractive”? If so, then what sizes?]*
- Both** How do you think this compares to what meanings are associated with body size and shape here (U.S./Georgia)? Does body size mean something different here? What does it mean here?
- Both** What would the people, in general, in *[insert place]* where you grew up consider a good body size or weight for a woman your height? *[If necessary, probe: Do they prefer larger body sizes? How large?]* Would you indicate which of these figures (from body-shape chart) they would choose for a woman your height? And what about your own family and close friends as you were growing up?

BEHAVIORALHealth

- Both** What kinds of things did you do to keep healthy in *[insert place]* where you grew up?
- A/C** What about in recent years since you have been living here in the U.S? What kinds of things do you do to keep healthy?
- A/A** What about in recent years? What kinds of things do you do to keep healthy?

Physical activity

- Both** How about you? Did you do any of those things? Tell me about that. *(Prompt, if necessary: Did you do a lot of dancing, running, walking, etc.? How often? If not: Why not?)*
- Both** What about in recent years, how physically active have you been? Tell me about some of the things you do to be active (in Atlanta)? *[If they are no longer active, prompt for reasons why]*

If lifestyle was not active in the Caribbean/back home/before recent years: Have you started doing any of those things since you have lived here in the U.S / in recent years? If yes, what have you been doing? How often?

Diet

- A/C** Have you done, or have you been doing anything to eat healthy in recent years since you have been living in the U.S? What sort of things have you done/do you do? *[If necessary, probe: What types of food have you tried eating? How have you been preparing these foods?]*
- A/A** Have you done, or have you been doing anything to eat healthy in recent years? What sort of things have you done / do you do? *[If necessary, probe: What types of food have you tried eating? How have you been preparing these foods?]*

Outcome expectations

Both *[Depending on whether participant indicated set goals or not, modify this question accordingly:*

When you achieve(d) / If you were to set and achieve *[choose from: physical activity/diet/health]* goals for yourself, how do you think that will / would affect you:

- Physically *[Probe as necessary: Did you feel/do you expect to feel healthier, have more energy; be smaller in body size, etc.]*
- Socially *[Probe, if needed: How, do you think/did, friends and family will react/react?]*
- Self-evaluation *[If necessary, probe: Was there/will there be a sense of self-satisfaction/dissatisfaction]*

Both *[Modify this question to be consistent with response to question given question immediately preceding this, above.]* Based on these outcomes *[specify physical, social, mental outcomes shared, above]*, do you / would you plan to change your eating and physical activity habits; do you think you need to? Would you explain your plans to change / not change?

PERSONALCognitiveIdentity

Both If you were asked to introduce yourself to a group of strangers. How would you introduce yourself? What aspect of your identity is most important to you? *[Probe for female, mother, A/C or A/A, as appropriate, professional, etc.]*

Health

Both When you think about being healthy, what does that mean to you? *[If prompt necessary: Does it have anything to do with how one looks, feels, etc.?] How would you define a healthy lifestyle? [If necessary, probe: What are some of the things that women need to do to become and remain healthy?]*

Body size

Both What do you think is a good body size, or weight, for a woman your height? What, if any, relationship do you think exists between body weight/size and health?

A/C How has your thinking changed since you have been living in the U.S? Have you always thought that this is a good body weight/size for a women your height? *[If needed, probe: What did you consider to be a good body weight when you lived in the Caribbean? If there has been a change: What caused you to change your opinion of what is a good body weight for a woman of your height?]*

A/A Have you always thought that this is a good body weight/size for a women your height? *[If needed, probe: What did you consider to be a good body weight when you lived with your family of origin? If there has been a change: What caused you to change your opinion of what is a good body weight for a woman of your height?]*

Diet

Both What do you consider healthy eating? *[If needed, prompt: “For example, are there certain kinds of foods or certain ways of preparing foods that make them healthier?”]*

Physical activity

Both How much physical activity, and what kinds of activity do you think a woman your age needs to be healthy? *[Probe for duration/frequency/type of exercise/physical activity]*

Obesity

Both To what extent do you think obesity is a problem in the U.S. today? Who do you think is affected? Please explain.

Personal goals (All these questions will be discussed with both A/A and A/C)

Both Do you have any goals for yourself in terms of your health? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for your health? OR What goals do you have for your health?]*

Do you have any goals for yourself in terms of healthy eating? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for healthy eating? OR What goals do you have for your health?]*

Do you have any goals for yourself in terms of an active lifestyle? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for a healthy lifestyle? OR What goals do you have for your health?]*

Do you have any goals for yourself in terms of body -weight or size? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for your body-weight or size? OR What goals do you have for your body-weight or size?]*

Self-Efficacy

Both How confident are you that you can achieve/maintain a healthy *[insert, one at a time: lifestyle, eating lifestyle/ active lifestyle/the body size/weight]*? Can you expand on that? *[If necessary, probe for diet-, physical activity-, and body size-related answers]*

ADDITIONAL INFORMATION (For all participants)

Thank you for taking the time to have this discussion with us. I have just a few additional questions

How tall are you? _____

What is your weight? _____

What is your marital/relationship status?

Married Single Divorced Separated Committed Relationship

How many children do you have? _____ How many children under the age of 18 live with you? _____

What is your occupation? _____

What is the highest level of education you completed?

Kindergarten Middle school High school, no diploma High school diploma/GED
Some college College degree Post graduate degree/professional beyond bachelor's

What is your annual household income? _____/week _____/2-weekly _____/month _____/year

Thanks again for your time!

Identification info for interviewer:

Afro-Caribbean Country of origin: _____ Time in USA: ____years

Africa-American

Age: _____

Place of interview (address): _____

Context notes (heat, noise, etc.): _____

Type of venue (coffee-shop, etc.) _____ Date: _____

Appendix E.2: DISCUSSION GUIDE: Version to Use in Interviews with Afro-Caribbean Women

Before we begin, I would like to tell you a little about how we will proceed. This study seeks to understand health and lifestyle attitudes and behaviors of African-American women and Afro-Caribbean immigrant women who now live in Metro Atlanta. I will ask you questions about how you and your close family and friends feel about the subject of health and about some of the health-related things that you do. Please feel free to ask questions as we go along. If you need to think about a question at any time, we can always return to it later in the discussion.

Thank you for agreeing to have this discussion with me.

First, I am going to ask you one question and then I will tell you a little about myself. Ready? Here is the question...

If you were asked to introduce yourself to a group of strangers. How would you introduce yourself? [Add] What aspect of your identity is most important to you? [Probe for female, mother, A/C, A/A, professional, etc.]

Thank you...

Now, let me tell you a little about my background. My parents are also from the Caribbean. We spent many years there. As a matter of fact, most of my early education was in Jamaica. Although we traveled to the U.S. often, I did not immigrate here until I was an adult. I moved to the U.S. in 2000.

Diet

Can you tell me a little about yourself in terms of where you lived when you were growing up? What are some of the foods that you remember eating? Was that typical of people living in [insert place]? How were foods typically prepared in your home and by others in your culture? [probe for details, if necessary, who cooked? How did they prepare the food?]

To what extent have you incorporated those kinds of foods [from family of origin] into your life in Atlanta? Can you tell me about it?

What role did food play within your family back home? [If needed, prompt: "For example, did your family get together for meals daily?" "Who ate together?" "Were there certain kinds of foods for certain occasions?" "What about the extended family, did you all get together often?" "How often?" "What kinds of foods were served?"]

What do you consider healthy eating? [If needed, prompt: "For example, are there certain kinds of foods or certain ways of preparing foods that make them healthier?"]

Have you done, or have you been doing anything to eat healthy in recent years since you have been living in the U.S? What sort of things have you done/do you do? *[If necessary, probe: What types of food have you tried eating? How have you been preparing these foods?]*

Do you have any goals for yourself in terms of healthy eating? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for healthy eating? OR What goals do you have for healthy eating?]*

How confident are you that you can achieve/maintain a healthy eating lifestyle? Can you expand on that? *[If necessary, probe for diet-related answers]*

Exercise/Physical activity

Now I'd like to talk to you about physical activity

How active were people (in general) where you grew up [insert place]? What sort of things did they do to keep active? *[Prompt, if needed: Did people walk a lot? Or, did you see a lot of people riding bicycles, running, dancing, etc. How often?]* What about your own family? How did they feel about physical activity? How important was exercising or physical activity? What sort of attitudes did people have toward exercising?

How about you? Did you do any of those things while you lived there? Tell me about that. *(Prompt, if necessary: Did you do a lot of dancing, running, walking, etc.? How often? **If not:** Why not?)*

What about in recent years, how physically active have you been? Tell me about some of the things you do to be active (in Atlanta)? *[If they are no longer active, prompt for reasons why]*

If lifestyle was not active in the Caribbean: Have you started doing any of those things since you have lived here in the U.S / in recent years? If yes, what have you been doing? How often?

Do you have any goals for yourself in terms of an active lifestyle? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for an active lifestyle? OR What goals do you have for an active lifestyle?]*

How confident are you that you can achieve/maintain an active lifestyle? Can you expand on that? *[If necessary, probe for physical activity-related answers]*

How much physical activity, and what kinds of activity do you think a woman your age needs to be healthy? *[Probe for duration/frequency/type of exercise/physical activity]*

Now let's talk a little more about health...

Health

When you think about being healthy, what does that mean to you? *[If prompt is necessary: Does it have anything to do with how one looks, feels, etc.?] How would you define a healthy lifestyle? [If necessary, probe: What are some of the things that women need to do to become and remain healthy?*

Think about family and friends that influenced you as you were growing up in the Caribbean; can you talk about what “being healthy” meant to them? *[If necessary, prompt: Does it have anything to do with how one looks, feels, etc.?)*

What kinds of things did you do to keep healthy in [insert place] where you grew up?

What about in recent years since you have been living here in the U.S? What kinds of things do you do to keep healthy?

Do you have any goals for yourself in terms of your health? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for your health? OR What goals do you have for your health?]*

How confident are you that you can achieve/maintain a healthy lifestyle? Can you expand on that? *[If necessary, probe for health-related answers]*

Body size

So, let's change the topic a little. I'm interested in knowing more about how people perceive body size and weight.

What kinds of meanings did people in [insert place where grew up] associate with body size or shape when you were growing up? *[If necessary, probe: Are certain sizes considered “healthier” or “sexier” or “more attractive”? If so, then what sizes?]*

How do you think this compares to what meanings are associated with body size and shape here (U.S./Georgia)? Does body size mean something different here? What does it mean here?

What would people, in general, in [insert place] where you grew up consider a good body size or weight for a woman your height? *[If necessary, probe: Do they prefer larger body sizes? How large?]* Would you indicate which of these figures (from body-shape chart) they would choose for a woman your height? And what about your own family and close friends as you were growing up?

What do you think is a good body size, or weight, for a woman your height? What, if any, relationship do you think exists between body weight/size and health?

How has your thinking changed since you have been living in the U.S? Have you always thought that this is a good body weight/size for a women your height? *[If needed, probe: What did you consider to be a*

good body weight when you lived in the Caribbean? If there has been a change: What caused you to change your opinion of what is a good body weight for a woman of your height?]

Do you have any goals for yourself in terms of body -weight or size? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for your body-weight or size? OR What goals do you have for your body-weight or size?]*

How confident are you that you can achieve/maintain the body size/weight you wish to maintain? Can you expand on that? *[If necessary, probe for body size-related answers]*

To what extent do you think obesity is a problem in the U.S. today? Who do you think is affected? Please explain.

CURRENT SOCIAL ENVIRONMENT

Finally, I want to ask you just a few questions about the people that you are close to now.

Tell me about the people that you are closest to...who are they? Where do they live? How do you keep in touch with them? *(Probe for method of communication – skype, social media, phone, in-person)* And, can you talk a little about how much contact you have with them? *[Probe for information about family and friends from home, if not mentioned, frequency, duration etc.][Probe also for extent of, and means of, contact with people back home]*

Who among your family (including significant other) and friends do you most like to be like? Tell me a little more about *[insert name]*. Why do you admire them/go to them for advice? Where do they live? Tell me about *[insert name]*'s lifestyle and attitude toward health. *[If necessary probe for diet and physical activity, and health attitudes and behaviors]*

Health

I am interested in understanding the role that family and close friends plays in your health decisions. Think about current closest family and friends that influence you; can you talk about what “being healthy” means to them, what they do to keep healthy, etc., and also talk about what being healthy means to you? *[If necessary, prompt: Does it have anything to do with how one looks, feels, etc.?*

Have you ever decided to do something to improve your health or had a doctor tell you that you needed to do something like walking more, exercising, changing what foods you eat? *[If yes, then ask]:* When was this? Tell me how the closest people (your significant other, family and friends) in your life reacted. *[Probe, if needed:]* Has anyone said or done something that stands out to you? Tell me about it.

Body size (Values/Attitudes/Norms *[Ask these questions choosing from persons named above, as current closest family and friends].*

What would your significant other and closest family and friends *[specify according to close friend, family referenced above]* say is the best weight/body size for a woman your age and height? Would you take a look at this chart and indicate which figure you think they would choose as the best figure for you? What about people who are bigger and smaller than your size – how do you think your close friends and family here (in the U.S.) would feel about those people?

Diet

Tell me about the types of food and drink they *[closest family and friends here in the U.S.]* normally have? What is their favorite meal? How is it prepared? Is this similar to how food was prepared in the Caribbean?]

Physical activity

How do your current closest friends and family members feel about exercising? Do they have the same beliefs about men and women exercising? Is this how most people of your culture feel about physical activity or is this just your family and friends?

What, if anything, do they do to be physically active?

Overall

[Depending on whether participant indicated set goals or not, modify this question accordingly:

When you achieve(d) / If you were to set and achieve *[choose from: physical activity/diet/health]* goals for yourself, how do you think that will / would affect you:

- Physically *[Probe as necessary: Did you feel/do you expect to feel healthier, have more energy; be smaller in body size, etc.]*
- Socially *[Probe, if needed: How, do you think/did, friends and family will react/react?]*
- Self-evaluation *[If necessary, probe: Was there/will there be a sense of self-satisfaction/dissatisfaction]*

[Modify this question to be consistent with response to question given question immediately preceding this, above.] Based on these outcomes *[specify physical, social, mental outcomes shared, above]*, do you / would you plan to change your eating and physical activity habits; do you think you need to? Would you explain your plans to change / not change?

ADDITIONAL INFORMATION (For all participants)

Thank you for taking the time to have this discussion with us. I have just a few additional questions

How tall are you? _____ What is your weight? _____

What is your marital/relationship status?

Married Single Divorced Separated Committed Relationship

How many children do you have? ____ How many children under the age of 18 live with you? ____

What is your occupation? _____

What is the highest level of education you completed?

Kindergarten Middle school High school, no diploma High schl diploma/GED
Some college College degree Post graduate degree/professional beyond bachelor's

What is your annual household income? ____/week ____/2-weekly ____/month ____/year

Thanks again for your time!

Identification info for interviewer:

Afro-Caribbean Country of origin: _____ Time in USA: ____years

Africa-American

Age: _____

Place of interview (address): _____

Context notes (heat, noise, etc.) _____

Type of venue (coffee-shop, etc.) _____ Date: _____

Appendix E.3: DISCUSSION GUIDE: Version to Use in Interviews with African-American Women

Before we begin, I would like to tell you a little about how we will proceed. This study seeks to understand health and lifestyle attitudes and behaviors of African-American women and Afro-Caribbean immigrant women who now live in Metro Atlanta. I will ask you questions about how you and your close family and friends feel about the subject of health and about some of the health-related things that you do. Please feel free to ask questions as we go along. If you need to think about a question at any time, we can always return to it later in the discussion.

Thank you for agreeing to have this discussion with me.

First, I am going to ask you one question and then I will tell you a little about myself. Ready? Here is the question...

If you were asked to introduce yourself to a group of strangers. How would you introduce yourself? [Add] What aspect of your identity is most important to you? [Probe for female, mother, A/A, professional, etc.]

Thank you...

Now, let me tell you a little about my background. My parents are from the Caribbean. We spent many years there. As a matter of fact, most of my early education was in Jamaica. Although we traveled to the U.S. often, I did not immigrate here until I was an adult. I moved to the U.S. in 2000.

Diet

Can you tell me a little about yourself in terms of where you lived when you were growing up? What are some of the foods that you remember eating? Was that typical of people living in [insert place]? How were foods typically prepared in your home and by others in your culture? [probe for details, if necessary, who cooked? How did they prepare the food?]

To what extent have you incorporated those kinds of foods [from family of origin] into your life in Atlanta? Can you tell me about it?

What role did food play within your family back home? [If needed, prompt: "For example, did your family get together for meals daily?" "Who ate together?" "Were there certain kinds of foods for certain occasions?" "What about the extended family, did you all get together often?" "How often?" "What kinds of foods were served?"]

What do you consider healthy eating? [If needed, prompt: "For example, are there certain kinds of foods or certain ways of preparing foods that make them healthier?"]

Have you done, or have you been doing anything to eat healthy in recent years? What sort of things have you done/do you do? [If necessary, probe: What types of food have you tried eating? How have you been preparing these foods?]

Do you have any goals for yourself in terms of healthy eating? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for healthy eating? OR What goals do you have for healthy eating?]*

How confident are you that you can achieve/maintain healthy eating lifestyle? Can you expand on that? *[If necessary, probe for diet-related answers]*

Exercise/Physical activity

Now I'd like to talk to you about physical activity...

How active were people (in general) where you grew up *[insert place]*? What sort of things did they do to keep active? *[Prompt, if needed: Did people walk a lot? Or, did you see a lot of people riding bicycles, running, dancing, etc. How often?]* What about your own family? How did they feel about physical activity? How important was exercising or physical activity? What sort of attitudes did people have toward exercising?

How about you? Did you do any of those things while you lived there? Tell me about that. *(Prompt, if necessary: Did you do a lot of dancing, running, walking, etc.? How often? **If not:** Why not?)*

What about in recent years, how physically active have you been? Tell me about some of the things you do to be active (in Atlanta)? *[If they are no longer active, prompt for reasons why]*

If lifestyle was not active in while growing up (back home): Have you started doing any of those things in recent years since you have lived here? If yes, what have you been doing? How often?

Do you have any goals for yourself in terms of an active lifestyle? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for an active lifestyle? OR What goals do you have for an active lifestyle?]*

How confident are you that you can achieve/maintain an active lifestyle? Can you expand on that? *[If necessary, probe for physical activity-related answers]*

How much physical activity, and what kinds of activity do you think a woman your age needs to be healthy? *[Probe for duration/frequency/type of exercise/physical activity]*

Now let's talk a little more about health...

Health

When you think about being healthy, what does that mean to you? *[If prompt necessary: Does it have anything to do with how one looks, feels, etc.?] How would you define a healthy lifestyle? [If necessary, probe: What are some of the things that women need to do to become and remain healthy?*

Think about family and friends that influenced you as you were growing up; can you talk about what “being healthy” meant to them? *[If necessary, prompt: Does it have anything to do with how one looks, feels, etc.?)*

What kinds of things did you do to keep healthy in [insert place] where you grew up?

What about in recent years? What kinds of things do you do to keep healthy?

Do you have any goals for yourself in terms of your health? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for your health? OR What goals do you have for your health?]*

How confident are you that you can achieve/maintain a healthy lifestyle? Can you expand on that? *[If necessary, probe for health-related answers]*

Body size

So, let's change the topic a little. I'm interested in knowing more about how people perceive body size and weight.

What kinds of meanings did people in [insert place where grew up] associate with body size or shape when you were growing up? *[If necessary, probe: Are certain sizes considered “healthier” or “sexier” or “more attractive”? If so, then what sizes?]*

How do you think this compares to what meanings are associated with body size and shape here (in Georgia)? Does body size mean something different here? What does it mean here?

What would people, in general, in [insert place] where you grew up consider a good body size or weight for a woman your height? *[If necessary, probe: Do they prefer larger body sizes? How large?]* Would you indicate which of these figures (from body-shape chart) they would choose for a woman your height? And what about your own family and close friends as you were growing up?

What do you think is a good body size, or weight, for a woman your height? What, if any, relationship do you think exists between body weight/size and health?

Have you always thought that this is a good body weight/size for a woman your height? *[If needed, probe: What did you consider to be a good body weight when you lived with your family of origin? If there has been a change: What caused you to change your opinion of what is a good body weight for a woman of your height?]*

Do you have any goals for yourself in terms of body -weight or size? Tell me about those goals. *[Probe, if necessary: Why don't you have goals for your body-weight or size? OR What goals do you have for your body-weight or size?]*

How confident are you that you can achieve/maintain the body size/weight you wish to maintain? Can you expand on that? *[If necessary, probe for body size-related answers]*

To what extent do you think obesity is a problem in the U.S. today? Who do you think is affected? Please explain.

CURRENT SOCIAL ENVIRONMENT

Finally, I want to ask you just a few questions about the people that are close to you now.

Tell me about the people that you are closest to...who are they? Where do they live? How do you keep in touch with them? *(Probe for method of communication – skype, social media, phone, in-person)* And, can you talk a little about how much contact you have with them? *[Probe for information about family and friends from home, if not mentioned, frequency, duration etc.] [Probe also for extent of, and means of, contact with people back home]*

Who among your family (including significant other) and friends do you most like to be like? Tell me a little more about *[insert name]*. Why do you admire them/go to them for advice? Where do they live? Tell me about *[insert name]*'s lifestyle and attitude toward health. *[If necessary probe for diet and physical activity, and health attitudes and behaviors]*

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Body size (Values/Attitudes/Norms) *[Ask these questions choosing from persons named above, as closest family and friend here in the U.S.]*

What would your significant other and closest family and friends *[specify according to close friend, family referenced above]* say is the best weight/body size for a woman your age and height? Would you take a look at this chart and indicate which figure you think they would choose as the best figure for you? What about people who are bigger and smaller than your size – how do you think your close friends and family here (in the U.S.) would feel about those people?

Diet

Tell me about the types of food and drink they *[closest family and friends here]* normally have? What is their favorite meal? How is it prepared? Is it similar to how food was prepared where you grew up?

Physical activity

How do your current closest friends and family members feel about exercising? Do they have the same beliefs about men and women exercising? Is this how most people of your culture feel about physical activity or is this just your family and friends?

What, if anything, do they do to be physically active?

Overall

[Depending on whether participant indicated set goals or not, modify this question accordingly:]

When you achieve(d) / If you were to set and achieve *[choose from: physical activity/diet/health]* goals for yourself, how do you think that will / would affect you:

- Physically *[Probe as necessary: Did you feel/do you expect to feel healthier, have more energy; be smaller in body size, etc.]*
- Socially *[Probe, if needed: How, do you think/did, friends and family will react/react?]*
- Self-evaluation *[If necessary, probe: Was there/will there be a sense of self-satisfaction/dissatisfaction]*

[Modify this question to be consistent with response to question given question immediately preceding this, above.] Based on these outcomes *[specify physical, social, mental outcomes shared, above]*, do you / would you plan to change your eating and physical activity habits; do you think you need to? Would you explain your plans to change / not change?

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What is your marital/relationship status?

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What is your occupation? _____

What is the highest level of education you completed?

Kindergarten Middle school High school, no diploma High schl diploma/GED

Some college College degree Post graduate degree/professional beyond bachelor's

What is your annual household income? ____/week ____/2-weekly ____/month ____/year

Thanks again for your time!

Identification info for interviewer:

Afro-Caribbean Country of origin: _____ Time in USA: ____years

Africa-American

Age: _____

Place of interview (address): _____

Context notes (heat, noise, etc.) _____

Type of venue (coffee-shop, etc.) _____ Date: _____