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## The Nutrition Labeling Act and the Weight Loss Experiences of **African American Women**

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# Walden University

College of Social and Behavioral Sciences

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Richardeanea Theodore

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Walden University

May 2022

#### Abstract

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by

Richardeanea Theodore

MPA, Baruch University, 2006

MA, New York University, 1976

BSN, Long Island University, 1974

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Public Policy and Administration

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#### Abstract

Obesity has reached epidemic proportions in the United States with four out of five African American women, aged 20 and older, being overweight or obese, resulting in excessive morbidity and mortality. Policy interventions have been developed to address the issue, but without much success in this population. The purpose of this Husserlinspired phenomenological study was to better understand how nutrition labeling influences eating behaviors of overweight and obese African American women in their weight loss efforts. The Socio-Ecological Model for Food and Physical Activity Decisions (SEMFPAD) was the theoretical framework for this study. Purposeful sampling and snowballing were used to recruit 12 overweight or obese African American women in New York City between the ages of 25 and 65 who gave voice to their lived experiences through in-depth semistructured interviews. Data were analyzed using Colaizzi's 7-step phenomenological analytic method. A significant finding was how the culture of "thinness" not only cultivates stigma regarding body size and negative selfperception, but also burdens African-American women with shame that may suppress any public display of weight loss efforts either through reading nutrition labels or engaging in physical activity. Nutritional support networks that include family, friends, and exercise companions were identified as critical components of weight loss efforts. Community informed public policy interventions that improve access to healthy food options and incentivize weight loss efforts were identified as positive social change strategies. Such approaches could reduce obesity-related co-morbidities and provide policymakers and healthcare providers with culturally appropriate strategies that can work.

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#### Dedication

With humility and gratitude, all praises are due to Almighty God Allah for showing me Grace with each step, for with him all things are possible. This dissertation is dedicated to my ancestors (grandmothers, mother and father) on whose shoulders I stand and, on whose wings, I am lifted. My maternal grandmother, Laura Doe, who raised me, whose legs I sat between as she combed and plaited my hair and planted the seeds of doing unto others, as you would like them to do unto you. She remained here on this earth with me until the ripe age of 110. My paternal grandmother, Richardeanea, whose name I carry, validated me every chance she got, and even seized opportunities that she did not have, to do so. My mother, Elizabeth and my father Wesley, taught me the value of looking at a glass as being half full, instead of viewing it as being half empty. The acknowledgment of my ancestors would not be complete without calling the name of my colleague and friend, Dr. Dorothy Jean Graham-Hannah (I'm missing you).

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I extend my immense gratitude to the women who voluntarily participated in this study. Thank you for using your voices and sharing your experiences to hopefully make a difference for others.

My educational memoir at Walden University reflected hard work, perseverance, and determination. I could not have completed this journey without the support received from my ancestors, my family, my mentors, my friends, my comrades, the faculty, and the blessings that came down, when the prayers went up.

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#### Chapter 1: Introduction to the Study

Contemporary society has a high prevalence of overweight, leading to obesity. Being overweight and obese is a highly significant factor and precursor for many health conditions, including diabetes, heart disease, and high blood pressure. The incidences of diseases such as heart disease, stroke, diabetes, arthritis, and some cancers are associated with the risk factor of obesity (Apovian, 2016; Hruby & Hu, 2015). For minority women, obesity is considered one of the more serious threats to health and life, as are smoking, hypertension, Type 2 diabetes, and sedentary lifestyles. Hales et al. (2017) reported that African American women had a higher prevalence of obesity at 54.8% compared to 50.6% for Hispanic women, 38.0% for non-Hispanic White women and 14.8% for Asian women. Furthermore, African American women demonstrated the highest risk of developing obesity as a condition from being overweight during adolescence, resulting in 95% of adolescent African American women with adolescent obesity remaining obese into adulthood (Scharoun-Lee et al., 2009).

This persistence of obesity, coupled with the fact that 82% of Black women met the Centers for Disease Control and Prevention's (CDC) classification as being overweight (CDC, 2017a; Ogden et al., 2017) suggested that focusing on imperative nature of exploring overweightness and obesity in African American women. In addition, the disproportionate number of African American women who are overweight and obese are at significant risk for weight related chronic diseases such as stroke, high blood pressure, Type 2 diabetes, cardiovascular morbidity and mortality, and certain types of cancers (Knox-Kazimierczuk et al., 2018).

The need for obesity prevention and treatment is particularly pressing in racial and ethnic minority populations because of the high proportion of overweight and obese persons in those populations. African American women have the highest rates of obesity, with four out of five African American women being overweight (Office of Minority Health, 2017). This population has the greatest risk for health issues at some point in their life and are 1.4 times more likely to be obese as non-Hispanic Whites (U.S. Department of Health and Human Services, 2017). While research shows that Black women report less social pressure to be slim, fewer incidences of weight-related discrimination, less weight and body dissatisfaction, and greater acceptance of overweightness than their White counterparts, there is a need to better understand and identify measures to control obesity in this population based on the serious threats to health and life associated with this disease.

#### **Background**

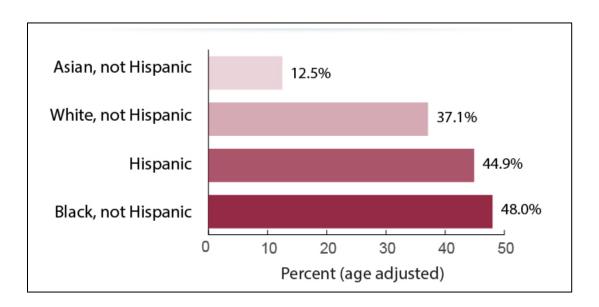
The United States has become one of the leading nations for overweight and obesity, with incidences in 39.8% of adults and the estimated medical cost totaling more than \$147 billion annually (An, 2015; Biener et al., 2018; Hales et al., 2017). The occurrence of obesity in the U.S. is higher for middle-aged adults, with non-Hispanic Blacks and Hispanics having the highest percentage of obesity among all ethnicities (CDC, 2017a; National Institutes of Health, 2018). The Global Health Observatory (as cited in World Health Organization, 2017) and the CDC (2017a) all reported noteworthy increases in obesity for all populations between 2006 and 2016, with a record-breaking increase of 39% among adult females during these years. Throughout the past 40 years,

overweight among adults aged 20 to 60 has increased from 44.8% to 66%. Obesity prevalence has nearly doubled during the same time period among adults aged 20 to 60, jumping from 13.3% to 32.1% (Hruby & Hu, 2015).

The increased rates of obesity are associated with increased death rates, particularly among African American Women (CDC, 2017b). Individuals diagnosed with obesity have a 10%–50% increased risk of death compared to those who are not obese (Abdelaal et al., 2017). Based on reports from the Office of the Surgeon General, deaths attributable to overweightness and obesity total 300,000 per year. Figure 1 shows that Blacks and non-Hispanic have the highest prevalence for obesity.

Figure 1

Disparity in Ethnicity for Obesity



Note. From Healthy People (2020, 2019).

African American women shoulder a disproportionately higher incidence of overweightness and obesity problems (Hales et al., 2017; Kumanyika et al., 2014; Office of Minority Health, 2017), with few studies reporting successful weight loss among this group. There is a compelling need to explore other ways of understanding the subjective experiences of African American women regarding overweightness and obesity. I will focus, therefore, on the experiences of overweight and obese African American women reading nutrition labels and engaging in physical activity. The findings from this study may add data to the body of knowledge regarding improved outcomes for overweight and obese African American women. Through this qualitative research, I aim to provide insight into the meanings that these women construct in their lives as they experience this phenomenon of obesity. My intent, through this descriptive, phenomenological study, is to develop an in-depth understanding of the African American women who are experiencing the phenomena of overweight or obesity (Creswell, 2013; McClaire, 2017).

#### **Problem Statement**

There is an overweight and obesity epidemic in the United States, with African Americans, Hispanics, and American Indians disproportionately impacted (Healthy People 2020, 2019). Racial disparity exists (between blacks and whites) in life expectancies, and years of life lost associated with multiple obesity related chronic conditions, such as diabetes, hypertension, coronary heart disease and stroke (Carnethon et al., 2017). African American women are more likely to die of obesity as a disease and of related chronic disease, evidenced by the age-adjusted prevalence of overweight and

obesity in non-Hispanic Black women at 79.6% higher than for non-Hispanic White women at 57.6% (Carnethon et al., 2017).

A number of policy interventions have been developed to address the issue of disparity in terms of overweight and obesity such as The Nutrition Labeling and Education Act of 1990, enacted by Congress in 2003. The intent of this bill is to promote healthy lifestyles and reduce obesity (Andrews et al., 2017). Although this act has been in effect for years, the prevalence of obesity and overweight among AA women has steadily increased. While the intervention provides a strategy for African American women to take personal responsibility for their health (VanEpps et al., 2016), it is unclear what impact this policy has had on their efforts to address overweight and obesity. Policy evaluation, aligned with the narratives and lived experiences of overweight and obese African American women, is important in informing policy change necessary to ultimately to reduce disease burden in this population.

#### **Purpose of the Study**

Using a phenomenological method, the purpose of the study was to explore the lived experiences of obese and overweight Black women and the influence of health policy (specifically the Nutrition Labeling Law), physical activity, and a healthy diet on weight loss efforts among members of this population group. Through this study, the experiences and voices of Black women were introduced by exploring their views on the aforementioned influences on weight loss.

#### **Research Questions**

Research Question 1: How does The Nutrition Labeling Law influence the eating behaviors in the everyday lives of overweight and obese African American women?

Subquestion 1: What role does obesity-related policies (such as nutrition labeling reading) play in weight loss in overweight and obese African American women?

Subquestion 2: What barriers do African American women experience when reading nutrition labels in their everyday lives?

Research Question 2: How do overweight and obese African American women engage in physical activity to lose weight?

Research Question 3: What are the determinants of weight loss success in African American women?

#### **Theoretical Framework**

The Socio-Ecological Model for Food and Physical Activity Decisions (SEMFPAD) served as the theoretical framework for this study (U.S. Department of Health and Human Services, 2015b). This model is aligned with the individual, the behavior, and the built, social, and policy environments. Socioecological models were first introduced as a conceptual model, by Bronfenbrenner, and later formalized as a theory in the 1980s (Bronfenbrenner, 1989). The initial theory by Bronfenbrenner illustrated nesting circles, a characteristic of many socioecological frameworks.

The importance of using behavioral approaches to address public policy problems was highlighted by President Obama. In 2015, he issued an executive order, using Behavioral Science Insights to Better Serve the American People (SBST), to inform

public policy (The White House, President Barack Obama, 2015). Ecological theories consider the important interplay between public policy, behavioral approaches and individual efforts to lose weight. The Nutrition Labeling Act is one policy passed in 1990 by President Bush (GovTrack, n.d.), and having undergone various reiterations, it was actually implemented in New York City where this research is being conducted. Further, SEMFPAD encompasses the governmental sector in both home and work sites, where policy may influence decisions and choices. This framework incorporates individual factors such as age, sex, socioeconomic status, race/ethnicity, and disability, as well as personal factors including psychology, knowledge and skills, genes, environment, and food preferences (Jung et al., 2017).

This research focused on aspects of SEMFPAD related to policy legislation to gather insight into the role that reading nutrition labels play in the attempts of overweight and obese African American women to lose weight. In addition, the SEMFPAD model calls for the examination of environmental factors other than nutrition to address obesity and overweight in AA women. The literature identifies physical activity as an important variable in address weight loss as depicted in the model. Therefore it was important to examine the lived experience of AA women and physical activity.

SEMFPAD was used in this research to explore the experiences of overweight and obese African American women with reading food labels in their efforts to lose weight. Key constructs of SEMFPAD are healthy eating and physical activity. The socioeconomic model depicts policy at the highest level of influence (Jung et al., 2017). The goals of these policy interventions is to influence individual behavior, inform key

stakeholders such as policy makers and reduce morbidity and mortality resulting from obesity. This study focused on the experiences of overweight and obese African American with reading nutrition labels and physical activity through the policy lens of the ecological framework. The findings may inform public policy's continued support of monitoring and reinforcing the intent of the Nutrition Labeling Law and improving physical guidelines as it relates to African American women.

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

This current study focused on the global and continually expanding problem of obesity, particularly in terms of the disproportionate impact on Black women. Experts contend that obesity is a stronger predictor of mortality and morbidity than either poverty or smoking (Seidell & Halberstadt, 2015; Williamson, 2017). It is important to explore and identify constructs influencing weight loss in African American women because the prevalence of obesity is highest for this group. Researchers have not successfully identified the constructs influencing weight loss in this population. It is important to make progress in that effort, especially because African American women have not been successful at weight loss with traditional weight loss interventions (Vaewsorn, 2015).

The obesity epidemic continues to be at the forefront of both research and policy. Satcher (2016), a former U.S. surgeon general, highlighted the significance of the overweight and obesity epidemic affecting children and adults in this nation. He offered a compelling argument for addressing overweight and obesity in African American women, asserting that weight gain disproportionately influences African Americans, Hispanics, and American Indians (Kayle et al., 2016; Kumanyika et al., 2014).

Satcher (2016) identified two concepts that contribute to overweight and obesity: the *pressure to consume more calories*, coupled with *decreased physical activity* (as cited in Kayle et al., 2016). These two concepts, along with social support and self-efficacy, are among factors shown in existing literature as influencing weight loss in African American women. These data guided my efforts through this phenomenological study to explore the lived experiences of overweight and obese African American women on using nutrition labels to make health choices. This study holds the potential to add the voice and experiences of African American women to the literature on overweight and obesity. Furthermore, the study's findings may inform public policy to better understand the influence of nutrition label reading obesity and overweight in this population.

A previous surgeon general had also highlighted obesity and the need for change. In 2007, former U.S. Surgeon General Carmona wrote that obesity was a health crisis affecting every state, every city, every community, and every school across the United States (Carmona, 2007). Nearly two out of three Americans are overweight or obese, and Carmona (2007) indicated that one out of every eight deaths in America is caused by an illness directly related to overweightness and obesity. In addition, Carmona highlighted the three key factors that must be addressed to reduce and eliminate obesity in America: increased physical activity, healthier eating habits, and improved health literacy (Carmona, 2007).

Through this study, I explored the lived experiences of overweight and obese African American women on using nutrition labels to lose weight by reading nutrition labels to make health choices. Existing literature pointed to variables of social support,

self-efficacy, physical activity, and public policy as being associated with weight loss. In this study's focus on the experiences of African American women reading nutrition labels, I gathered the perspectives and voices of a population that carries the burden of the overweightness and obesity epidemic. Identifying the experiences of how and if reading nutrition labels contribute to weight loss in this population can enable researchers and clinicians to further support nutrition labeling policies to design interventions for preventing and treating overweight and obesity in African American women. The concepts that were explored considered the multimodal, multi-factorial, and multi-disciplinary approaches to address overweight and obesity (Healthy People 2020, 2019; Satcher, 2016).

#### **Nature of the Study**

I used a phenomenological approach developed by Husserl (Christensen et al., 2017) based on calls for identifying noteworthy statements to form larger data sets or themes that, in the case of the present study, illustrated the experiences of overweight or obese African American women. Phenomenology was the approach best suited to describing the lived experiences of African American women experiencing overweightness and obesity where researchers can elicit participants' lived experiences while striving to suspend preconceived notions and known information (Yin, 2016). Data were collected through semistructured interviews of 12 African American women experienced in overweight and obesity and analyzed through Colaizzi's (1987) seven steps to phenomenological analysis (e.g., coding was done carefully to reflect the significant characteristics of the participants).

#### **Definitions**

Healthy eating pattern: reading nutrition labels to identify all foods and beverages (variety of vegetables, whole fruit, whole grains, fat-free or low-fat diary, variety of proteins, and oils) within an appropriate caloric level and limits saturated fats, trans fats, added sugar and sodium.

Physical activity: For purposes of this study, physical activity was conceptually defined as engaging in at least 30 minutes of moderate-intensity activity (such as walking briskly) on most—and preferably all—days of the week.

*Public policy:* Public policy, in terms of the study's focus on obesity, refers to legislation passed with the intent of eliminating barriers that contribute to overweightness and obesity (Nutrition Labeling Law).

*Self-efficacy:* Self-efficacy refers to the belief that the individual can take actions that are effective in changing their weight.

Social support: Social support is defined as supportive others, such as family or friends.

Successful weight loss: For the purpose of this study, successful weight loss is defined as weight loss of 10% of body weight over the immediate past year.

#### **Assumptions**

In this study, I made several assumptions. The primary assumptions of this study were (a) that overweight and obesity are preventable conditions, and (b) that the perspectives of overweight and obese African American women can inform future research. My intent, with this qualitative study, was to add the voices of overweight and

obese African American women to the existing body of literature. In undertaking this study, I assumed there are different ways of understanding the phenomenon of overweight and obesity in African American women. Polit and Beck (2008) suggested that that the subjective experiences of those undergoing the phenomenon supports the naturalistic paradigm that many constructions of reality are possible.

A third assumption of this study was that individual responsibility is important, but that simply urging overweight and obese African American women to engage in physical activity or dieting is reductionist and limiting. I used open-ended questions to structure the interviews, with the focus on capturing the lived experiences of African American women's experiences of weight loss or losing weight.

#### Limitations

This study also included several limitations. Limitations of the study included the self-reported nature of some of the collected data. Participants' interest in presenting themselves in the best light is a factor of which all researchers must be aware. In addition, researchers must be cognizant that if participants from churches are overly represented, the study results may be skewed in terms of the social support variable because faith-based organizations generally tend to provide higher levels of social support than other organizations.

The major limitation of this qualitative study was its lack of transferability to other studies or groups based on the nature of qualitative research. In this qualitative study, aspects of transferability have been discussed to enhance trustworthiness. In addition, moral or ethical questions could not be answered by this research (Polit & Beck,

2008). In this study, I addressed the issues of weight loss, overweight, and obesity as complex entities.

#### **Delimitations**

In qualitative studies, access to participants who meet eligibility criteria can surface both as a surprise and a challenge. Considering that the sample size for my study was 12 overweight or obese African American women being recruited from a population where African American women are disproportionately impacted with the highest incidence of overweight and obesity, an assumption was that recruitment would have been straightforward. Even though I followed the underpinnings of descriptive phenomenology for sample size, the initial efforts at recruitment yielded only two participants. Permission granted by Walden's IRB to expand recruitment to include the five boroughs in New York City instead of only Brooklyn, New York, increased the pool of interested applicants who met the eligibility criteria. Because the setting was in New York City, initial recruitment from all 5 boroughs would have shortened the time to recruit eligible participants. In addition, this study's findings may not be transferable to African American women in others settings (example, other states where socioecological conditions may be different).

#### **Implications for Social Change**

There are several implications for social change, mainly through culture. This current study has promising implications for social change through potentially increasing awareness of disease disparities related to overweight and obesity in African American women. Information gained from this study regarding the experiences of overweight and

obese African American women can contribute much-needed resources for the health care professionals and policymakers who are at the forefront of designing health care policies and obesity prevention programs that focus on better nutrition intake and improved physical activity levels. The findings from this study in New York City can be used to inform local health departments, councilpersons, assemblypersons, senators, and representatives to work with local food restaurants to enforce aspects of nutrition labeling applicable to African American women. Based on the study findings, attention of policymakers may be focused on the built environment to address issues related to engagement in physical activity.

Culture may be part of the disparity of the impact of overweightness and obesity on Black women versus other population groups. Interventions to improve physical activity levels among Black women should incorporate the social, cultural, economic, and environmental contexts of Black communities. To a large degree, cultures define images of desirable bodily appearances. The contemporary Black culture is certainly diverse and multifaceted but is largely driven by mainstream media. The 1980s hip-hop culture exerted major social, psychological, and even educational influences on the definition of Black female beauty, sexuality, and body image, particularly among teenagers and young adults, with music videos being a particularly powerful agent (Agyemang & Powell-Wiley, 2013). The factors contributing to the genesis of obesity in African American women reflect the concepts of ecological approaches, specifically: biology (i.e., genetic loci, cardio-metabolic effects of visceral adiposity and leptin resistance), behavior (i.e., gestational weight gain, weight cycling, low levels of physical activity); and social

determinants of health (i.e., perception of body size, psychosocial stressors, socioeconomic position and neighborhood environment). Therapeutic approaches and recommendations are offered to incorporate behavioral, cultural, and environmental factors specific to obesity in Black women. Aligned with the conceptual framework of this study, Agyrmang and Powell-Wiley suggested that interventions should leverage cultural norms related to body size and existing social networks in the Black community through community-based interventions that increase physical activity and improve dietary habits.

Objectification of women and African American women, especially, has not helped the obesity epidemic. The majority of the women in music videos tended to have fuller body shapes, with these images tending to objectify women in the impressionable minds of the young people who consumed this media. As music video viewership continues to get younger, lines are blurred between reality and entertainment. These reoccurring images may suggest to young female viewers that it is acceptable and even desirable to be full figured. In addition, such media content also shows Black men as being accepting of curvier female forms (Agyemang & Powell-Wiley, 2013).

Positive body image may be one benefit, but the normalization of fuller body types also may bring consequence. It can be problematic, however, for Black women to embrace fuller body types, if that acceptance inadvertently results in young people becoming more accepting of overweightness and obesity. Obese women are more likely to suffer from chronic diseases such as coronary artery disease, hypertension, diabetes, and cancer. The same culture that condones a relatively bigger body shape for its women

may also be responsible for contributing to those related ill health effects on its women (Agyemang & Powell-Wiley, 2013). Although it may be psychologically and culturally healthy for Black women to have their own internally generated body-shape models, it is more important for Black women to maintain normal body weights and to practice healthy lifestyles that include physical activity and healthy eating habits.

Research has indicated that Black women are at increased risk for being obese and for developing obesity-related diseases. Reports also have indicated that Black women engage in physical activity or exercise less frequently than any other racial or ethnic group in the United States (U.S. Department of Health and Human Services, 2017). Because Black women have high prevalence of chronic disease and obesity, finding strategies to promote physical activity in this population is very important from a public health standpoint. More culturally appropriate interventions are needed to address the higher rates of obesity among Black women, since most efforts to promote physical activity among this group have relied on programs that are based away from home such as in medical centers and clinics. Limited mobility, time restraints, and financial limitations make it difficult for many individuals to attend such programs.

There are many barriers to physical health for African American women in the United States. Most women report a lack of time and motivation, with caregiving also being a barrier that is common to both African American and Hispanic women (Bauer et al., 2017; Knox-Kazimierczuk & Shockly-Smith, 2017). African American women also list additional unique reasons for not engaging in leisure-time physical activities, including (a) the lack of a safe place to exercise or walk in the urban areas they live in,

(b) self-consciousness about body image, (c) the burden and cost of redoing their hair after physical activity or exercise, (d) long work hours and employment commitments, (e) family-related barriers such as a lack of support and a lack of time because of extensive family and church commitments, and (f) cost barriers such as the prohibitive expense of gym membership or personal trainers (Bauer et al., 2017; Knox-Kazimierczuk & Shockly-Smith, 2017).

Bauer et al. (2017) observed that Black women were excessively laden with being overweight, yet continued to maintain personal body satisfaction based on their strong religious commitments. Bauer et al. sought to explore the association of factors such as demographics, involvement in religious factions, and beliefs about body image with motivation and confidence regarding weight loss. These researchers studied 240 Black women who were heavily involved in church activities, performing a cross sectional study that revealed correlations between religiosity and body image, body image and weight loss, and body image and healthy lifestyle factors. They concluded that faith-based, weight-loss interventions inclusive of health benefits and weight management and that incorporated godly images of good health were predominant among participants' attitudes (Bauer et al., 2017).

#### **Summary and Transition**

In this chapter, I introduced the main elements of the study, including the problem, purpose, research questions, and significance. Chapter 2 presented a review of the existing literature, beginning with a synthesis of the literature written on the obesity epidemic and its effect on the health of overweight and obese individuals. In the literature

review, I also explore factors associated with overweight and obesity (i.e., cultural, social, environmental, genetic, and political issues). Disease co-morbidities and costs associated with weight loss are other important aspects of the obesity epidemic to be addressed in the literature review.

Chapter 2 includes a thorough report and synthesis of literature related to overweightness and obesity among African American women. I analyze studies identifying weight loss success, as well as those that identify the barriers faced by African American women. In Chapter 2, I also explain the research questions in greater detail, as well as further define the conceptual framework of the study.

In Chapter 3, I describe the chosen methodology of qualitative research and the specific use of a phenomenological approach to capture the experiences of overweight and obese African American women who live in New York City. Chapter 3 also outlines the ecological approach for capturing the voices, personal perspectives, and accounts of overweight and obese African American women.

In Chapter 4, I present the qualitative principles of data collection that were used to ensure rich, thick descriptions through prolonged and persistent engagement (Golden et al., 2015). I used reflective journaling, taping, audit trails, and member checking, per Lincoln and Guba (1985). Chapter 5 includes a summary and interpretation of the findings based on the study questions, literature review, and conceptual framework that guided the study.

#### Chapter 2: Literature Review

Weight loss is the most significant intervention for overweightness and obesity. Numerous health benefits have been associated with losing weight, including lowered blood pressure, prevention or delay of Type 2 diabetes, and improved cholesterol levels. Weight loss has been the focus of numerous types of interventions such as group and individual behavioral treatment, pharmacology, diets, programs to increase active exercise, surgical interventions, lifestyle changes, or combinations of these factors. The purpose of the study was to explore the lived experiences of obese and overweight Black women and the influence of health policy (specifically the Nutrition Labeling Law), physical activity, and a healthy diet on weight loss efforts among members of this population group.

#### **Literature Search Strategy**

I searched multiple databases, using multiple keywords, to identify current literature focused on the current study's topic of obesity in African American women. The search encompassed databases including: Medline, Pubmed, PubmedCentral, Cinal Plus, Cochrane Plus, Cochrane Database of Systematic Review, Sage Premier, Dissertations and Theses, Political Science Complete, ProQuest Health and Medicine Complete, Healthy People 2010, Healthy People 2020, Google Scholar, Psych Info, Psych Net, National Institute of Public Health Access, EMBASE, Ethnic News Watch, Global Health, Lexis Nexis Academic Universe, National Library of Medicine, and Genetics and Medicine. Search terms included the following terms: *obesity, overweight, African American women, African American men, non-Blacks, gender, socioeconomic* 

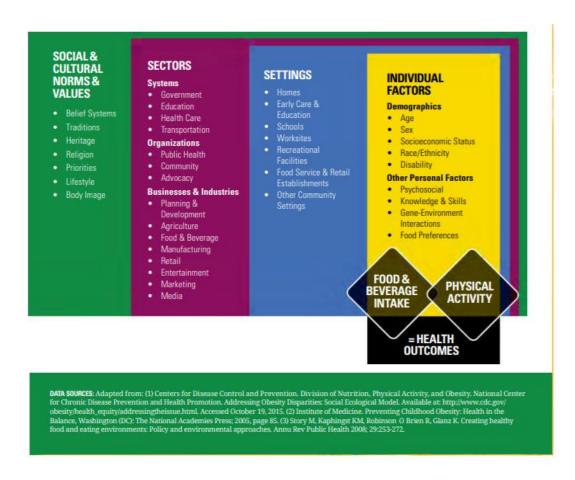
status, gender, white women, education, adult obesity, and culture. I included only those articles written in English. The literature search also included searches of Google, Google Scholar, and specific peer-reviewed journals including *Obesity*, *Obesity Research*, *Advances in Nutrition*, *Advances in Preventive Medicine*, the *American Journal of Epidemiology*, and the *American Journal of Public Health*.

#### **Theoretical Framework**

I applied the SEMFPAD as the theoretical framework for the current study. This model addresses individual factors such as age, sex, socioeconomic status, race/ethnicity, and disability that, applied to the current study, provided a basis for such causes of obesity. Personal factors: psychological, knowledge and skills, genes, environment, and food preferences provide insight and facilitate the consideration of the central role of personal factors for overweight and obese African American women in their attempts to lose weight. The socioecological model is an ecological approach that is congruent with the fact that obesity among African Americans is a multidimensional, complex condition with deep economic, social, cultural, and policy/environmental contributors (see Figure 2).

Figure 2

A Socio-Ecological Model for Food and Physical Activity Decisions



Note: From USDA. Dietary Guidelines for Americans, 2015-2020 (8th ed.).

 $https://health.gov/sites/default/files/2019-09/2015-2020\_Dietary\_Guidelines.pdf$ 

The SEMFPAD is based on the reciprocal determinism among behavior, environment, and person, with the constant interactions among those factors constituting the basis for human interaction. Human functioning is viewed as the product of a dynamic interplay of personal, behavioral, and environmental influences. An explanation of reciprocal determinism shows the strong tenets of an ecological framework. An ecological approach seems to be congruent with a review of the literature that showed obesity among African Americans as a multidimensional, complex condition with deep economic, social, cultural, and environmental contributors.

The key concepts of intrapersonal development, interpersonal transactions, and interactive functioning of organizational and social systems are analytic principles for understanding psychosocial phenomenon. The Nutrition Labeling Act of 1990 (nutrition label reading) is a policy initiative that was addressed in this study and is currently being enforced in New York City (see Gostin et al., 2014), which is significant in that the research was being done on a subset of the population in New York City. Gostin et al. reported that New York City has led the way in measures requiring restaurants to include caloric information on their menus and are enforcing efforts by having city health inspectors issue violation notices to area restaurants who do not comply with this regulation.

To understand the eating habits of college students, Sogari et al. (2018) and Deliens et al. (2014) conducted exploratory studies, using a qualitative design based on an ecological model to analyze the factors (barriers and enablers) that college students perceive to influence healthy eating habits. In Sogari et al.'s study, semistructured

interviews were held with 35 college students from Cornell University, using an ecological model. Themes emerged for both common barriers and enablers to eating healthy food. The barriers to healthy eating were time constraints, unhealthy snacking, convenience high caloric foods, stress, high prices of health food and easy access to junk food. The enabler to healthy eating were improved food knowledge and education, meal planning, involvement in food preparation and being physically active.

The purpose of Deliens et al.'s (2014) study was to explore what influences were present for the eating behaviors of Belgian students at a university. Deliens et al. used a qualitative design involving five focus groups with 21 female and 14 male students.

Deliens et al. found a number of factors influencing their habits: their social networks, their macro environment, their individual factors, and their physical environment.

Further, relationships between their eating behaviors and determinants were modified by such university characteristics as clubs, exams, residency, and college lifestyle. Deliens et al. used Nvivo9, for data analysis in an inductive approach.

Similarly, Caperon et al. (2019) used an ecological model to illustrate the influence of the multiple determinants of behavior and to inform culturally appropriate dietary behavior for people living with diabetics or high blood glucose level in urban Nepal, Italy. Diabetes, like obesity are noncommunicable diseases that on the rise, and both diseases have in common, a major contributing factor of unhealthy eating behaviors. Findings from 38 semistructured interviews showed that the most important determinants of dietary behavior include cultural practices (gender roles related to cooking) social support from family and friends, the political and physical environment (political will,

health food availability) and individuals motivations and capabilities). The authors (Caperon et al., 2019) suggested that the ecological model of this study is the ability to categorize the determinants of behavior and to place the socio-cultural context as the dominant influencing environment on behavior in general, and specifically on dietary behavior.

Applying the SEMFPAD model fit the present study, for it specifically addressed the individual factors of age, sex, socio-economic status, and race that provided a basis for causes of overweight and obesity. The personal factors of psychology, knowledge and skills, genes, environment, and food preferences played a central role for overweight and obese African American women in the present study in their attempts to lose weight. Thus, SEMFPAD was an ecological approach congruent with a multidimensional, complex condition with deep economic, social, cultural, and policy/environmental contributors to obesity among African American women.

#### **Review of Literature**

According to Masters et al. (2015), overweight and obesity were associated with 18.2% of deaths among adults in the United States from 1986 to 2006. Obesity appeared to have a particularly strong impact among Black women, with 26.8% of their deaths associated with a BMIs of 25 kg/m2 or higher (Masters et al., 2015). Concerning White women, 21.7% of deaths were associated with overweight or obesity. Among Black men, 5.0% of deaths were associated with overweightness or obesity, while 15.6% of deaths among White men were associated with overweightness or obesity. Data also showed that

the more recent the birth year, the greater the effect that obesity had on mortality rates (Masters et al., 2015).

The terms *overweight* and *obesity* are defined differently throughout the range of health literature. Overweight and obesity are commonly determined by body mass index (BMI), which is calculated by weight adjusted for height. BMI is determined by dividing a person's weight in kilograms by their height in meters squared, with a BMI of 18.5–24.9 being considered normal, while a BMI of 25–29.5 is considered overweight (Komaroff, 2016; Muller et al., 2016). The practical definition of obesity, therefore, is based on BMI. Weight-related health risks are determined using either measurement of body fat or BMI, with BMI being the most common method for determining obesity and overweightness in adults. Waist-hip ratio is another method used for determining overweightness and obesity (Muller et al., 2016).

Obesity is defined as having a BMI of 30 or above, with BMIs of 40 or above indicating morbid obesity (National Heart, Lung and Blood Institute 2018; National Institutes of Health, 2018). Obesity is defined as a label for amount of weight based on height over what is acceptable for healthfulness (CDC, 2017b). The terms overweight and obesity also identify "ranges of weight that have been shown to increase the likelihood of certain diseases and other health problems" (CDC, 2017b, para. 1). The CDC claimed certain strictures and parameters for understanding obesity, which is known as a set number based on the BMI (World Health Organization, 2018). The CDC claimed that an adult with a BMI over 30 is obese and has a high rate of likelihood for contracting

diabetes, with 36% of the population at risk for such a diagnosis (Leung et al., 2017; Ogden et al., 2017).

## **Public Policies on Obesity**

Despite the plethora of available treatments, overweight and obesity have reached epidemic and pandemic levels (Hruby & Hu, 2015). Some bills and laws have been introduced and passed in an attempt to prevent and control obesity regarding labels and menus. It is recognized that the approach to addressing overweight and obesity is multipronged, to include individual responsibility (social support, self-efficacy, physical activity), socioeconomic factors, and policy. This research examined the influence of one such policy that was enacted for the country on November 8, 1990, when President Bush signed The Nutrition Labeling and Education Act of 1990 (GovTrack, n.d.). The Menu Labeling and Education Act was introduced to Congress in 2003 (Congress.gov, n.d.) and was referred to the Committee on Energy and Commerce.

The intent of this bill was to establish nationwide requirements for nutrition labeling of food in restaurants chains with more than 20 establishments (VanEpps et al., 2016). I sought to explore the impact of this policy on the lived experiences of obese African American women in New York city to identify strategies that may inform public policy to better address the needs of overweight and obese African American women (Nutrition Labeling Law) to addressing overweight and obesity for a subset of the population in New York City who are already disproportionately impacted with disease related racial disparities.

Regarding a report from the Behavioral Risk Factor Surveillance System (BRFSS), the CDC shows that for every U.S. state, the percentage of Black adults with obesity is higher except for three states—Montana, Maine, and New Hampshire, though both New Jersey had no data reported and Idaho had no data available (Trust for America's Health Team, 2020). In New York City, obesity is considered to be an epidemic. As such, local elected and appointment officials (New York City Mayor, Commissioner of Health, and key City Council members) have championed the Nutrition Labeling Act, as a policy approach to addressing racial and socioeconomic disparities in health outcomes. The Nutrition Labeling Act of 1990 is a policy initiative that was addressed in this study and is currently being enforced in New York City (Gostin, 2014), which is significant in that the research is being done on a subset of the population in New York City. Gostin (2014) reported that New York City has led the way in measures requiring restaurants to include caloric information on their menus and are enforcing efforts by having city health inspectors issue violation notices to area restaurants who do not comply with this regulation.

Even with the emphasis from policy, there remains a lack research exists on African American obesity and weight control. Even with the increase in recent interest over the past three decades, fewer than 50 studies focused on prevention or treatment of obesity in African Americans. African Americans are at the top of many of the health status indicators related to overweight and obesity, with high rates of morbidity and mortality often accompanying these illnesses and diseases in African Americans. It is unclear whether the available interventions are effective in addressing obesity in African

American communities. Subsequently, it is important to explore other approaches that may inform public policy, such as the experiences of the individuals, African American women, with reading nutrition labels when making choices regarding what they are eating in their everyday lives.

## **Risk Factors of Obesity**

There are many factors that place individuals at greater risk for obesity. Lack of physical activity is one. The World Health Organization (WHO; 2018) reported physical inactivity as being the fourth leading risk factor for global mortality, accounting for 6% of deaths globally. A more recent analysis of the worldwide burden of disease further estimated that physical inactivity was responsible for: 6% of the incidences of coronary heart disease, 7% of Type 2 diabetes incidences, 10% of breast cancer cases, and 10% of colon cancer incidences. The WHO further concluded that if physical inactivity could be decreased by 25%, more than 1.3 million deaths could be averted every year (Lee et al., 2014).

Risks go beyond lack of physical activity. The causes and risk factors of chronic diseases such as cardiovascular disease, stroke, diabetes, cancer, obesity, and arthritis are well established and documented, with a small set of common risk factors being responsible for most of those chronic diseases. These risk factors, which include unhealthy diet, physical inactivity, and tobacco use, are modifiable and are the same for both men and women. These causes are expressed through the intermediate risk factors of hypertension, hyperglycemia, dyslipidemia, overweight, and obesity.

The major modifiable risk factors, in conjunction with the nonmodifiable risk factors of age and heredity, explain the majority of new events of heart disease, stroke, chronic respiratory diseases, and some cancers. Evidence shows that regular physical activity plays an important role in the prevention of chronic disease and has been consistently associated with lower risks of premature death. Physical inactivity is a well-established modifiable risk factor for leading causes of death including: coronary heart disease, stroke, hypertension, hyperlipidemia, Type 2 diabetes, metabolic syndrome, and certain forms of cancer. Additionally, physical activity can help prevent excess weight gain and facilitate weight loss, particularly when combined with reduced calorie intake (Koch, 2014; Macera, 2015).

Despite these health benefits of physical activity, most Americans are sedentary. Women are overall more sedentary than men, African American women reported particularly low levels of regular physical activity (19.8%) and suffered disproportionately from related chronic conditions, such as obesity and its comorbidities (Flegal et al., 2015). Black women had the highest prevalence of overweightness and obesity in the United States (Flegal et al., 2015; Ogden et al., 2017). They were less likely to participate in physical activity weight-loss programs and tended to have low success rates when they did participate (Yeary et al., 2018). Physical activity is a variable component of the energy balance equation that is particularly important in the pathogenesis of obesity and in its treatment and prevention. Nevertheless, interventions aimed at improving physical activity levels among Black women have generally been unsuccessful (Versey, 2014).

The American Medical Association's (2013) declaration that obesity meets the criteria for classification as a disease aligned with similar statements from the American Association of Clinical Endocrinologists (2012) and the National Institutes of Health (2019). The American Association of Clinical Endocrinologists sponsored a resolution that the House of Delegates of the American Medical Association adopted to recognize obesity as a disease state with multiple pathophysiological aspects requiring a range of interventions to advance obesity treatment and prevention, joined in the resolution by the American Society of Bariatric Physicians, the American College of Cardiology, the American College of Surgeons, the American Academy of Family Physicians, the American College of Cardiology, the American College of Surgeons, the American College of Family Physicians, the American College of Reproductive Medicine, the American Urological Association, the Society for Cardiovascular Angiography and Intervention, the Endocrine Society, the American Society of Anesthesiologists, and the American College of Gastroenterology (American Society for Metabolic and Bariatric Surgery, 2013).

#### **Biology of Obesity**

Obesity is a metabolic condition. Obesity is characterized by an increase in the number and size of adipocytes. It results from a long-standing imbalance between energy consumption and energy expenditure, including energy utilization for basic metabolic processes and energy expenditure from physical activity. The three components of energy expenditure are resting (basal) energy expenditure (e.g., heat production for maintenance of body temperature, maintenance of ionic gradients across cells, and resting cardiac and

respiratory function), diet-induced thermogenesis, and physical activity (McDonald, 2014). Additionally, age, body size, and genes influence energy use.

The most variable and most easily modifiable factor, however, is the amount of physical activity engagement. However, the etiology of obesity is multifactorial and far more complex than simply a mismatch between energy intake and energy output.

Although this view allows easy conceptualization of the various mechanisms involved in the development of obesity, obesity is far more than simply the result of eating too much and/or exercising too little. The etiology and pathogenesis of obesity involve additional factors, including: genetic and environmental factors (primary level etiologies), endocrine and metabolic factors (pathogenesis and pathophysiology), race, sex, age, ethnic and cultural factors, socioeconomic status, psychological factors, dietary habits, physical activity levels.

The impact of genetics on obesity has long been a concern in the scientific community. The genetic influences of obesity were not generally accepted until Stunkard (1986) demonstrated (through large, population-based twin and adoption studies) that genetic factors do indeed play an important role in human obesity. A sample size of 540 adult Danish adoptees were divided into four weight classes, thin, median weight, overweight and obese. The findings showed that there was a strong relation between the weight class of the adoptees and the body-mass index of their biologic parents, for the mothers; however, for the father there was no relation between the weight class of the adoptees and the body mass index of their adoptive parents (p. 193). Evidence has shown the etiology of common phenotypic obesity to be multifactorial (Guiducci et al., 2013).

Obesity is dependent on a complex interaction of predisposing genetic factors and causal environmental and behavioral factors (Grant, 2014). Ultimately, all forms of obesity result from a long-standing imbalance between energy intake and energy expenditure, including energy use for basic metabolic processes and energy expenditure from physical activity. Generally speaking, obesity developing at a young age is more likely to be influenced by gene-related changes in energy balance, whereas adult onset obesity is more likely to have stronger environmental components (Andreasen & Andersen, 2009). Epigenetic, nutritional, socioeconomic, and racial or ethnic influences also play independent and interdependent roles in the phenotypic trait (Scharoun-Lee et al., 2009).

The biology of obesity is complex. Understanding the genetics of obesity is equally complex, with key molecules and cells in the central nervous system and peripheral metabolic and hormonal pathways having reciprocal effects on both energy intake and expenditure (Drenowatz, 2016; Haider-Markel & Joslyn, 2017; Ramachandrappa & Farooqi, 2011). Multiple gene variants encode for the many signaling molecules and receptors used by parts of the hypothalamus and gastrointestinal tract (GIT) to regulate food intake. Understanding the structure, chemistry, and physiology of these neuro-hormonal systems, as well as their interactions with homeostatic regulators in the hypothalamus, other central feeding regulatory centers (including the cortex, basal ganglia, and the limbic system), and peripheral pathways, has yielded substantial progress in an era of genomic wide associated studies and advanced DNA microarray/chip technology. Nonetheless, a single profile for the phenotype

remains incompletely elucidated, and many of the gene variants encoded for the modulation of these mechanisms are either unknown or not yet well-characterized across studies (Berthoud et al., 2011; Heianza & Qi, 2019; Rohde et al., 2019).

There remain unanswered questions regarding biology and obesity. What researchers and practitioners do know about the regulation of fuel balance is that neuro-hormonal signals from the GIT and adipose tissue converge on the hypothalamus, where they are integrated and then serve to regulate energy intake and energy expenditure.

These physiologic mechanisms are under the command of multiple encoded proteins from multiple gene loci, from different genes, and from different chromosomes. Although beyond the scope of this discussion, the hypothalamic neurocircuits regulating energy balance have been reviewed extensively. For a detailed consideration of this data, the reader is referred to any number of reviews on the topic (Dietrich & Horvath, 2013; Rohde et al., 2019; Schneeberger et al., 2013). The remainder of this review focuses on the molecular genetics of obesity that underlie these metabolic pathways.

For a condition that has become increasingly prevalent across the globe in a span of only the past 3 to 5 decades, and occurring more frequently in relatives, disentangling the contributions of genes and shared environmental influences on obesity has proved to be challenging. Two frequently employed strategies for generating heritability estimates have been twin studies and adoption studies (Silventoinen et al., 2010). *Heritability*—the chance that offspring will inherit a trait of obesity and body weight as described by the BMI—is consistently high, ranging from 50% to 70% across such studies (Elks et al.,

2012; Goodarzi, 2018; Grant, 2014), while heritability for total body fat is as high as 80% (Andreasen & Andersen, 2009).

These numbers, along with robust twin studies data, demonstrate obesity to be under genetic regulation. Although the recent worldwide increase in overweightness and obesity can be attributed, in large part, to the increased availability of low-cost, energy-dense foods and to increasingly sedentary lifestyle, the effect of these factors is more pronounced in individuals who are genetically susceptible to these environmental insults (Andreasen & Andersen, 2009). Hence, it is the response of an individual's genetic background to given environments that determines susceptibility to common (polygene) obesity (Andreasen & Andersen, 2009).

Aspects of obesity and overweight associated with early death have been examined by experts in hopes of determining genetic factors that would assist with controlling facets of this ever-increasing numbers of overweight populations.

Schneeberger (2019) noted current research results from suggesting that deletion of the hypothalamus's function of the Irx3 gene, which regulates and controls body composition and body mass, would be an effective means of deleting the differential energy balance regulation. The careful deletion of the Irx3 was thought to potentially eradicate fat levels in mice, with those mice that were fed a high-fat diet and were Irx3 deficient being thinner than those mice that were fed the same diet but had Irx3 at normal levels (Schneeberger, 2019).

The current literature has described the overlapping continuum between monogenic and polygenic forms of obesity. Four genes (MC4R, PCSK1, POMC and

BDNF) have been involved in the two conditions (Loos et al., 2017; Rohde et al., 2019; Russo et al., 2010). However, for the purposes of reviewing the genetic causes of obesity, it is useful to categorize the disorder into three basic subgroups based on suspected etiology, namely: monogenic obesity (non-syndromic obesity), syndromic obesity, and polygenic (common) obesity. While the rare monogenic and syndromic forms of obesity clearly demonstrate a genetic origin, the current global obesity epidemic is multifactorial and polygenic and circumscribes the current foremost investigative challenges toward a more wholesome elucidation of the genetic factors involved in phenotypic expression. Several groups have reviewed the overlapping continuum between monogenic and polygenic forms of obesity (Upadhyay et al., 2018). In the following sections, I describe monogenic, syndromic, and polygenic obesity in more detail and comment on what researchers know about the possible roles of the fat mass and obesity-associated (FTO) gene, the insulin-induced gene 2 (INSIG2), leptin, and the most recent player (Smemo et al., 2014).

Monogenic obesity (or non-syndromic obesity) includes rare, severe obesities that occur in the absence of developmental delays and are caused by single gene defects. The most thoroughly investigated genes are mutations in the leptin gene, the leptin receptor gene, prohormone convertase-1, the POMC gene, the MC4R gene, and peroxisome proliferator-activated receptor gamma 2 genes. Monogenic obesities, for the most part, are genetically straightforward, following the rules of Mendelian inheritance. In monogenic obesities the respective mutations are sufficient by themselves to cause the disorder in obesogenic environments. Although only a very small percentage of

individuals carry these single gene defects, monogenic obesity models and investigations, mostly based on animal and family studies, have served to forge progress in understanding the metabolic pathways involved in energy balance and the pathophysiology of the more common and elusive polygenic form of obesity.

Additionally, those genes in which major defects cause monogenic obesity can be involved in the susceptibility to polygenic obesity as well, through common genetic variations or polymorphisms (Upadhyay et al., 2018).

To date, researchers have identified about 20 additional single gene disruptions that result in autosomal forms of obesity (O'Rahilly, 2009). The first single gene defect demonstrated to be causative for monogenic obesity was leptin, identified in 1997 (Dubern & Clement, 2012). This mostly adipocyte-derived satiety hormone serves as a mediator of long-term regulation of energy balance, suppressing food intake in non-obese subjects and thereby inducing weight loss. Leptin and other genes in its pathway encode proteins that are responsible for the regulation of appetite. The identification of an inborn deficiency of leptin in extremely obese children from consanguineous families was responsible for paving the way to the first pharmacologic intervention for obesity based on molecular genetic findings.

Syndromic obesity comprises early-onset, severely obese individuals additionally distinguished by mental retardation, dysmorphic features, and/or organ-specific developmental abnormalities. In contrast to monogenic obesity, these disorders arise from discrete genetic defects or chromosomal abnormalities at several genes and can be autosomal or X-linked. One of the most well characterized forms of syndromic obesity is

Prader-Willi syndrome (PWS), a disorder in which seven genes (or some subset thereof) on chromosome 15 are deleted or unexpressed on the paternal chromosome. PWS is characterized by low muscle tone, short stature, incomplete sexual development, cognitive disabilities, problem behaviors, and a chronic feeling of hunger that can lead to excessive eating and life-threatening obesity (Cassidy et al., 2012; Singh et al., 2017). Because both monogenic and syndromic forms of obesity tend to have high penetrance, efforts to detect causal genetic variants have been quite fruitful (Rankinen et al., 2006).

Linkage studies have identified two genes – FTO and INSIG2 – to be associated with common obesity (Andreasen & Andersen, 2009). Variants in the FTO gene are associated with BMI and increased risk for obesity. Studies have demonstrated that FTO variations are associated with modestly increased food intake and satiety, and also with decreased lipolytic activity in adipocytes. The FTO gene is the first common genetic variant unequivocally associated with adiposity, specifically involved in the regulation of energy intake and energy expenditure (Coban et al., 2017; Fawcett & Barroso, 2010; Jacobson et al., 2012). Fawcett and Barroso (2010) stated that genetic factors contribute variations in BMI for 40–90% of the population. The authors reported that single nucleotide polymorphisms within the FTO gene were the first to be associated with human body mass in 2007. Sanoudou et al. (2009) posited that genetic factors contribute to obesity and that the phenotype of obesity is determined by either a single dysfunctional gene (monogenic obesity) or polygenic (common) obesity.

INSIG2 encodes a protein thought to regulate the proteins responsible for fatty acid synthesis and adipogenesis. An INSIG2 variant is associated with increased BMI.

Interestingly, variations in the melanocortin 4 receptor and in the BDNF gene, both identified as causative of monogenic obesity, seem to account for a measurable number of common obesity cases as well. Phenotype associated with variations in both FTO and INSIG2 is dependent on environmental factors as well. Among homozygous carriers of the variant of FTO associated with increased BMI, those who were physically active showed a BMI almost two points lower than those who were inactive. In a small study of INSIG2 variants, physical activity seemed to modify the effects of the genetic variation on BMI (Coban et al., 2017; Leonska-Duniec et al., 2018).

The role of leptin in regulating energy intake and energy expenditure has been cited in numerous studies (Bohan et al., 2019). Interestingly, the findings of Coban et al. (2017) showed that unadjusted serum leptin levels were higher in fasting blood samples of Black women than in White women who had similar age, BMI, and menopausal status. For the same sample of women, a decrease of serum leptin levels was associated with lifestyle changes in areas such as physical activity, diet, alcohol consumption, and cigarette use.

One of the main impetuses for the pursuit of studies related to the genetics of obesity is an attempt to explain its recent rapidly rising prevalence over the past three to five decades, and in particular, the rising frequency of extreme and young-onset obesity phenotypes. As mentioned, the gene pool is unlikely to have changed substantially enough over this short period of time to account for this epidemic, while western dietary habits, activity levels, and the environment have changed markedly. Therefore, it is safe to reason that whatever the role of genes in obesity, environment plays a key interactive

role. If genetic influences are as important as estimates of familial and heritability data suggest, then it is likely that genes rely on environmental triggers (e.g., sedentary lifestyle and obesogenic society) for their expression of the phenotype. There are likely several other gene variations that together account for an increased risk in obesity. Study of these genes is difficult since environmental factors like physical activity and diet are also playing a role (Qi & Cho, 2008).

## Other Suggested Reasons for Obesity

Swierad et al. (2017) conducted a qualitative study to examine food intake and physical activity of African Americans. The researchers used a semistructured, in-depth interview format with a group of 25 African Americans who were students at Columbia University, alumni of Columbia University, or lived in close proximity to Columbia University. Swierad et al. examined the influence of ethnic and mainstream culture on participants' food and exercise choices, generating findings that highlighted the influences of both ethnic and mainstream cultures on the health behaviors of African Americans, who the researchers concluded were able to pick and choose from either culture. Swierad et al. suggested that these findings may have implications for designing health promotion programs for African Americans. Although this study has limitations in that the convenience sample used represents a very small percentage of African Americans, the research represents a step in the right direction of examining and exploring the experiences of a group that is disproportionately impacted by overweightness and obesity.

### **Racial and Gender Considerations for Obesity**

Nationally represented studies found that non-obese Black women are 54–60% more likely to become obese than non-obese White women (Arroyo-Johnson & Mincey, 2016; Bleich et al., 2018; Gailey & Bruckner, 2019; Haughton et al., 2018; Khan & Sievenpiper, 2016; Williamson, 2017). Haughton et al. (2018) suggested that the lower incidence of obesity in White women versus African American women is related to lower BMI as a rest of the lower energy expenditure of African American women (compared to Whites), even when following a diet consistent with the Dietary Guidelines for Americans, Blacks gained more weight over a 20-year period (Gailey & Bruckner, 2019; Haughton et al., 2018; Williamson, 2017).

Gailey and Bruckner (2019) found that although Black women adhere equally to the behavioral interventions as White women, they are more likely to be overweight. The authors suggested that this distinction of obesity between Black and White women might be due to the diet passed onto Americans from past European generations. Whereas White women's body genetics adapted to the foods served in Western and Eastern Europe and brought over to the Americas, Black women, whose ancestors were from Africa, Asia, or other non-European areas, had different body metabolisms that were passed down to modern Black women. Such biological differences in genetic heritage are not often considered when women are prescribed a diet and exercise regime (Gailey & Bruckner, 2019; Haughton et al., 2018; Ryan & Kahan, 2018).

Bleich et al. (2018) found that after controlling for income, White women exhibited lower incidences of obesity, concluding that there were no racial disparities

among poor Black and White women under these conditions. The authors further reported the absence of race disparities in obesity among poor urban women sharing the same social context (residential segregation) under similar environmental and social conditions. African American women, when compared to White women, are disproportionately influenced by overweightness and obesity.

# **Ecological Approach for Exploring Obesity**

An ecological approach appears to be most congruent with the literature review findings that obesity among African Americans is a multidimensional, complex condition with deep economic, social, cultural, behavioral, and environmental contributors.

Socioecological frameworks address three key aspects that are recurring themes in obesity literature: (a) host, biology, behavior, and adjustment to address education and change in behavior; (b) vehicle (food and physical activity) to address engineering technology; and (c) environmental factors (physical, economic, and sociocultural, and policy). This qualitative study added the policy arm of an ecological approach. Chafe (2017) highlighted the value of qualitative description in addressing many questions that arise for health services and policy researchers to make contributions within clinical policy and decision-making settings.

#### Host, Biology, Behavior, and Adjustment

The focus on obesity using ecological approaches has produced multiple studies determining such causes of obesity based on the individual. Experts have suggested that the biological foundations of obesity are as much to blame as physical and environmental factors (Albuquerque et al., 2017; Sartorius et al., 2015; You & Henneberg, 2018).

Experts agreed that groups sharing the same obesogenic environment have a higher propensity for the development of obesity (Kogelman et al., 2015; Tang et al., 2017; Voisin et al., 2015).

Dietz et al. (2015) supported an ecological approach for exploring overweight patients with mild to moderate obesity using new treatment strategies. These strategies included the use of technology and engaging healthcare professionals other than physicians to provide clinical counselling focused on diet and physical activity, two of the themes used in the conceptual framework of this study. Dietz et al. was interested in looking at the impact of technology in supporting integrated electronic medical records, telephone support, text messaging, remote technology, and smartphones and tablets with weight loss applications for monitoring food intake and physical activities were examples of innovative technological approaches for supporting prevention and reduction in overweight and obesity. Dietz et al. suggested that healthcare providers should be equipped with skills necessary to provide clinical counselling and behavioral interventions, reduce health care professional bias, and work in teams to link clinical and community resources towards the goal of prevention and treatment of overweight and obese individuals.

#### Vehicle (Food and Physical Activity) to Address Engineering Technology

Pratt et al. (2017) conducted a systematic review of clinical trials in obesity disparities research. Similar to other studies, this systematic review called for cardiovascular-related obesity disparities research across multiple levels to include individual, policy, personal, policy, and environmental research avenues. The authors

emphasized the socioecological models' support of multiple spheres of influence on health, suggesting that the combined effects of interventions at multiple levels have potentially significant additive effects. Interventions at the community level were found to be important for reducing health care disparities, including disparities in overweight and obesity (Pratt et al., 2017).

Restrepo's (2016) findings reported a modest decrease in BMI and a lower risk for obesity, though reviews were mixed. The lessons learned from these studies can be used to inform key stakeholders, including individuals, healthcare professionals, and policymakers, that mandatory calorie labeling laws may help to reduce body weight throughout the United States and may have greater impact among low economic minority groups. Restrepo's conclusion that if the average body weight impact of federal menu labeling regulations across New York State is similar to the modest body weight impact of local calorie labeling laws rolled out in New York counties, menu labeling alone is unlikely to be sufficient to reverse the obesity epidemic. Restrepo's compelling conclusion suggested a possible approach for reversing overweight and obesity in African American women, a group that is disproportionally impacted by overweightness and obesity. Consideration must be given to individuals' involvement at the social cognitive level of social support and self-efficacy as well as at the environmental levels of the economic, social, built, and policy arenas.

Hickman's (2016) qualitative study of 12 African American women's lived experiences regarding the Nutritional Food Labeling Act generated five themes: (a) appreciation of the National Food Labeling Understanding, (b) the skills required to

enable National Food Labeling Understanding, (c) hurdles in following National Food Labeling, (d) the usefulness of National Food labeling Understanding, and (e) time constraints. The Nutritional Food Labeling Act is a policy that can be used to help individuals modify their lifestyles by focusing on what they are eating and based on an understanding of how to read nutrition labels, make better decisions regarding healthier foods.

## **Environment (Physical, Economic, Sociocultural, and Policy)**

An important component of the socioecological model is the policy environment, often supported by legal interventions. Morain and Mello (2013) explored public support for legal interventions directed at health behaviors to fight noncommunicable disease and highlighted the use of the policy arm of an ecological framework to address the high prevalence of chronic diseases such as obesity. The authors reported on the findings of a national survey of 1,817 adults, suggesting that the support for policy interventions was high overall but was substantially greater among African Americans and Hispanics than among Whites and was tied to perceptions of democratic representation in policy making. Morain and Mello noted high support for strategies that enable people to exercise healthful choices, such as menu labeling and improving access to nicotine patches.

Whitt-Glover et al. (2014) similarly concluded that there was a need for studies that use objective physical activity measures, assess long-term intervention impact, and include more attention to strategies for increasing retention and adherence to physical activity goals. Whitt-Glover et al.'s findings showed that African American women and men have higher rates of sedentary behavior than other racial/ethnic subgroups.

Furthermore, African American women reported lower rates of physical activity than African American men. A social-ecological framework considers the individual, the behavior, and the built, social, and policy environments that may converge to increase and maintain physical activities among African American women.

Kumanyika et al. (2014) also suggested this coverage for increasing physical activities, reporting that Black Americans had less exposures to physical and policy environments that promote healthy eating and active living options. The authors accessed 600 peer-reviewed articles, 24 of which pertained to types of policy and environmental strategies and were published between January 2000 and May 2009. Kumanyika et al. noted the absence of effective interventions for Black American children and adults as well as the higher prevalence of obesity for those populations. Black American children were underrepresented in the studies reviewed by the authors. Policy and environmental interventions are two key aspects of ecological approaches, but this study yielded limited insights that could be used to prevent childhood obesity in African American children.

## **Intervention Practices**

Current strategies have not contained the growing obesity epidemic (You & Henneberg, 2018). Furthermore, the complexity of overweight and obesity resembles that of other complex communicable diseases for which socio- ecological approaches to control have been successful—for example, smoking, infectious diseases, and coronary heart disease. The conclusion of the World Obesity Federation (Bray et al., 2017) was that obesity is a disease and that individuals suffering from the disease should have access to medical advice and support. The policy statement of the World Obesity

Federation addressed policy related activities aligned with ecological frameworks such as advocating for healthy food and physical activity at intergovernmental, governmental, and local levels.

The World Obesity Federation also focused on prevention through efforts to collaborate with policy makers, health professionals, and researchers to promote best practice interventions to prevent weight gain and to alleviate the burden of overweightness and obesity (Bray et al., 2017). In addition to exploring the levels of a social ecological model to examine overweightness and obesity, Mozaffarian et al. (2018) suggested that critical measures such as the challenges and opportunities of time should be integrated to provide a better understanding of healthy eating and physical activity.

When governments want advice on the likely impact of their policies, they have traditionally turned to economists. However, an emerging stream of literature has suggested that psychological/behavioral science can also be useful in informing government policy decisions (Garvey et al., 2016). Thus, an increasing number of public policy officials are now recognizing that their policies may stand or fall on sociocultural, cognitive, and behavioral fact. Secondly, a pivotal theme at the core of the obesity control and prevention issue, particularly when viewed from a public policy and legal vantage point, is the debate over private/personal choices versus public health.

Yang and Nichols (2017) placed the issue in the current context, suggesting that government intervention is necessary and justified to reduce obesity. The authors presented a delicate balance regarding individual responsibility for pursuing health and happiness and government intervention in these areas as an unwarranted intrusion into

privacy and a person's freedom to eat, drink, and exercise as much or as little as he or she desires. The poll revealed little support for policies that would constrain consumer choices – limiting the amounts or types of food that can be purchased or raising taxes on unhealthy foods or drinks, for example (Yang & Nicols, 2017). The policy and public health law approach to obesity prevention and control rests on the argument that the law can be used to create conditions that enable people to lead healthier lives and that the government has both the power and the duty to regulate private behavior in order to promote public health (Yang & Nichols, 2017).

Former CDC director Jeffrey Koplan established the Public Health Law Program (PHLP) in 2000 after consultations with CDC program directors and extramural partners, seeking to lead the agency's public health law efforts (CDC, 2017c). The PHLP is currently part of the Office for State, Tribal, Local, and Territorial Support. The public health law approach to obesity involves the application of tried and tested legal strategies to new issues. At its inception, the PHLP was generally welcomed by obesity researchers, clinicians, public health professionals, anti-obesity advocacy groups, and activists while being criticized by rights-oriented consumer groups and some individuals as an impingement on civil liberties. This controversy was an expected manifestation of the American struggle between individual choice and public health whenever the government exercises its power and legal authority in such arenas, as it has in a variety of areas including drugs, tobacco, alcohol, motorcycle helmets, sexuality, and gun control.

Americans, particularly those on the political right, have always been conflicted regarding the role that government should play in their private lives and personal choices.

The concerns and questions are always similar, questioning where the government's duty to protect public health ends and where excessive intrusion on individual rights, personal choice, and privacy begins. When a certain percentage of the population's personal choice is interpreted by the government as threatening or deleteriously impacting the society's public health, social wellbeing, or economic wellbeing, citizens question whether the level of government legal intervention is acceptable or excessive. Regarding these questions, obesity prevention the effort to develop interventions to help women lose weight and become healthier seem to fall into the realm of public policy. While obesity is not a communicable disease threatening the health of others, it does have other consequences that society generally wishes to avoid.

In the United States, several strategies have been explored to reduce caloric intake, including the federally assisted nutrition program called Supplemental Nutrition Program for Women, Infants and Children, consumer information through nutrition labeling, and marketing and nutrition standards. Townshend and Lake (2017) suggested the importance of reviewing lifestyles of children and adolescents for trends of overweightness and obesity. A review of current evidence in Townshend and Lake's article explored how the built and food environments in the United Kingdom may contribute to current overweight obesity levels by influencing physical activity and dietary behaviors at individual and community levels. Greenspace is an important aspect of the built environment and is associated with indirect beneficial effects of mitigating the effects of obesity as a result of reducing stress and improving socialization.

There is a need for planning across multiple environments, including public policy, public health, and advocacy arenas. The goal is to embrace opportunities for proactive interventions that address the association of obesity prevalence with certain features of the built environment. A study conducted by Maharana and Nsoesie (2018) suggested that understanding the association between key aspects of the built environment and obesity prevalence can lead to structural changes that could encourage physical activity and decrease obesity. The built environment can positively influence health by making available certain resources, such as safe recreational and activity spaces, housing, and availability of healthier food choices at affordable prices.

While regulatory approaches to obesity prevention are limited, governments have employed a range of laws and regulatory measures in the name of obesity prevention. A systematic overview of current laws addressing diet-related risk factors in the European Union and the United States was conducted by Sisnowski et al. (2015). The authors first defined the term regulation by assigning two separate meanings – one that identified subordinate or delegated legislation issued by the executive branch of government and the second dealing with the act of process of controlling by rule restriction. Sisnowski et al. restricted their search to regulatory measures that (a) limit or discourage excessive caloric intake, and (b) are stipulated by law. The authors found that the current regulatory approaches most prevalent in Europe and the United States are limited in reach and scope, with political palatability seeming to be instrumental in predicting the introduction and adoption of legislation.

Donaldson et al. (2015) examined legislative and state-level factors associated with enactment of adult obesity prevention legislation in the United States, reviewing 487 adult obesity prevention bills introduced between 2010 and 2013. Seventeen percent of the bills (81 of them all together) were enacted across 35 states and the District of Columbia. A majority of the bills (71 of the 81 examined) were introduced in New York City. Donaldson et al. found that most of the bills focused on diet, but that a larger number of bills regarding physical activity were enacted. The most prevalent topics were food and beverage taxes and access to healthy foods. Legislation in the category of food and beverage taxes had the lowest enactment rates (8%). Feasibility of enactment and the law's potential effectiveness in modifying obesity risk factors are key considerations for stemming the obesity epidemic.

Donaldson et al. (2015) reported that New York City has led the way in measures requiring restaurants to include caloric information on their menus and are enforcing efforts by having city health inspectors issue violation notices to area restaurants who do not comply with this regulation. Restrepo (2016) analyzed the impact of New York's local mandatory calorie labeling law on body weight. Findings revealed that the point-of-purchase provision for caloric information on chain restaurant menus reduced BMI by 1.5% and lowered the risk of obesity by 12%. Furthermore, Restrepo reported that caloric labeling had a larger impact on the body weight of lower income individuals, especially ethnic minorities.

#### **Nutrition Labeling Law**

Current statistics on obesity show continued increases among average U.S. citizens (Papanicolas et al., 2018). Most at risk, however, are African American women, who show alarming rates for obesity, for the conditions and diseases associated with obesity, and for the comorbidities and mortality rates associated with obesity (Carnethon et al., 2017). While many organizations, both governmental and state-wide, have initiated preventative measures for this ever-increasing problem, there are few such measures, such as reading nutrition labels that focus on African American women.

States have increasingly embraced their responsibility for citizen wellbeing by passing legislation that addresses childhood obesity, improves the quality and types of food served in schools, and provides mandates for improving physical activity. VanEpps et al. (2016) stated that obesity-related legislation to address adult obesity is limited at the state and federal levels, suggesting that the majority of programs are focused on specific obesity-related diseases. However, adults can find obesity-related, legislative-driven materials on the Internet regarding community or workplace interventions.

In his continuing efforts to improve the health and health behaviors of Americans, in 1989, Dr. Louis W. Sullivan, then secretary of the U.S. Department of Health and Human Services, introduced two powerful health initiatives: the introduction of a new and improved FDA food label and the release of Healthy People 2000 (U.S. Department of Health and Human Services, 2015a). One outcome of Dr. Sullivan's insightfulness was the enactment of legislation on Nov. 8, 1990, when President Bush signed the Nutrition Labeling and Education Act of 1990. This legislation required most packaged foods to

include labels providing standardized information about serving sizes and nutrition content.

This single piece of legislation has undergone several proposed changes that have been favorable to consumers. Three years after the initial passage of the legislation, nutrition facts labels were required to appear on packaged foods. The U.S. Department of Agriculture proposed changes to the nutrition fact labels in 2014, significantly improving the information available to consumers. Among these changes were added size requirements for sugar, changes to recommended calories to be consumed in one setting, changes in serving size, and adjustments to the percentage of daily value for key nutrients such as calcium, iron, Vitamin D, and potassium.

The Nutrition Labeling and Education Act (NLEA) was signed into law by President George Bush in 1990. Under this federal bill, the FDA has the authority to regulate health-related food labeling requirements for the majority of food in the United States. Pomeranz (2012) reported that the stated purpose of the NLEA is "to prescribe nutrition labeling for foods, and for other purposes" (Nutrition Labeling and Education Act, 1990). Further, the Congressional Record demonstrates additional purposes are to "help consumers make sense of confusing nutrition labels, curb misleading claims, base information on scientific evidence to support dietary habits linked to good health, give consumers the ability to make appropriate choices for themselves, and ensure uniformity" (Nutrition Labeling and Education Act, 1990).

Despite the wealth of available treatments, however, prevalence of overweight and obesity has remained unchanged between 2003 and 2012 (CDC, 2017c; Ogden et al.,

2017). Ogden et al. posited that obesity prevalence remains high and that surveillance must continue. An increasing number of bills and laws have been introduced and passed in an attempt to prevent and control obesity. One such policy was enacted on Nov. 8, 1990, when President Bush signed The Nutrition Labeling and Education Act of 1990. The Menu Labeling and Education Act was introduced to Congress in 2003 and was referred to the Committee on Energy and Commerce. The intent of this bill was to establish nationwide requirement for nutrition labeling of food in restaurants chains with more than 20 establishments (VanEpps et al., 2016).

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A review of the NLEA shows that the most prevalent interventions focused on food and beverage taxes and access to healthy foods. Donaldson et al. (2015) suggested that legislation in the category of food and beverage taxes had the lowest enactment rates (8%). Feasibility of enactment and the law's potential effectiveness in modifying obesity risk factors are key considerations for stemming the obesity epidemic.

The Nutrition Labeling Act of 1990 (nutrition label reading) is a policy initiative that was addressed in this study and is currently being enforced in New York City (Gostin, 2014). This is significant in that the research is being done on African American women in New York City. This author reported that New York City has led the way in measures requiring restaurants to include caloric information on their menus and are enforcing efforts by having city health inspectors issue violation notices to area restaurants who do not comply with this regulation.

A systematic review was conducted by Tseng et al. (2018) where 17 reports on adult obesity were examined. The authors summarized that in general there was no evidence that policies intending to promote physical activity and health eating had

beneficial effects on weight. However, four of the nine studies reported on physical activity/built environment, demonstrating reduced weight. Five of the nine studies targeted the food/beverage environment did not show decreased weight. However, the 2016 study on Calorie Labeling Law, requiring chain restaurants to post calorie counts on menus in New York reported that the main result for weight/BMI outcomes showed a marginal BMI reduction in counties implementing the policy compared to counties that did not.

Restrepo (2016) analyzed the impact of New York's local mandatory calorie labeling law on body weight. Findings revealed that the point-of-purchase provision for caloric information on chain restaurant menus reduced BMI by 1.5% and lowered the risk of obesity by 12%. Furthermore, Restrepo reported that caloric labeling had a larger impact on the body weight of lower income individuals, especially ethnic minorities.

Mozaffarian et al. (2018) explored public support for legal interventions directed at health behaviors to fight noncommunicable disease, highlighting the use of the policy arm of an ecological framework to address the high prevalence of chronic diseases such as obesity. Mozaffarian et al. reviewed strategies for improving the country's high propensity for obesity through new government strategies focused on nutrition and health. The authors examined how the government's policy making process fails to recognize the increase in diet related diseases and associated costs claiming policies are more apt to address such broad sociocultural determinants of local environments (Mozaffarian et al., 2018).

The suggestion of Hojjat (2015) that the overweight and obesity issue could be related to rising fast food outlets, availability of vending machines and too much advertising, highlights the need for policies such as the Nutrition Labeling Law. While individuals may not be able to influence the food industry to reduce the proliferation of fast food outlets and television marketing, they have at their disposal a policy intervention, the Nutrition Labeling Law that can be used to make decisions regarding healthier food choices. Hojjat argued that not only is obesity a public health problem, as the second leading preventable death in the United States, 300,000 lives lost annually, but that obesity is also a huge economic problem. The disease burden associated with obesity when translated to cost may amount to as much as \$147.0 billion annually for adults and 14.3 billion annually for children (Hojjat, 2015). One approach to individuals consuming healthier food is through food policy interventions, such as the Nutrition Labeling Law. It is reported that 250 more calories are consumed per day, as more families consume cheap, supersized meals and calorie dense foods from fast food and restaurants Based on Hojjat's report, national public opinion polls show that around 83% of Americans are in favor of menu labeling.

In discussing how to influence the obesity landscape using health policy, Peeters and Backholer (2017) posited that an environment that promotes healthy eating and physical activity across the entire community, regardless of risk, is needed to impact the health burden of obesity. Overweight and obese African American women, are often the most disadvantaged, may benefit from policies, such as the Nutrition Labeling Law, where policy is addressed at the universal population level, with additional focus on those

at the lower end of the socioeconomic gradient. This two-prong approach is illustrated by the Twin Approach, developed by the Center for Disease Control and Prevention. The Twin Approach aim is to promote healthy behaviors by simultaneously implementing population-wide interventions and tailored interventions, such as policies requiring nutrition labeling that address the needs of subgroups that are at highest risk of weight gain (Peeters & Backholer, 2017).

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#### **Obesity Prevention and Mitigation**

Ewart-Pierce et al.'s (2016) literature review of interventions for obesity prevention and mitigation employed a multi-level, multi-competent (MLMC) intervention approach. Among the 14 studies reviewed, the authors noted examples of successes in the areas of preventing obesity, reducing overweight, improving healthful behaviors and enhancing some psychosocial indicators. MLMC approaches incorporate 0the tenets of social ecological models (multilevel approaches, changes in health

behavior, multiple contexts, communities and environments, individuals, interpersonal, organizational, and policy levels) like the one used for as the framework for this current study, the SEMFPAD Ewart et al.'s findings showed promising impacts in the areas of increasing intake of healthier foods and beverage, improvements in physical activity, obesity reduction, and mixed results of psychological outcomes.

Kumanyika et al. (2007, 2014) acknowledged the limited role that interventions such as dieting and physical activities play in reducing overweight and obesity in the African American community. Kumanyika (2017) stated that the role of African American lifestyles and community environments must be tied to physical activity, changes in lifestyle, and diet. This involves reframing obesity-related research for the African American community. Consideration must be given to how the lifestyles and behaviors of African Americans are influenced by targeted marketing and availability of food.

Kumanyika (2017) investigated the prevalence of obesity that persists for those societies world-wide that have high health and economic costs. The author considered how such societies are often challenged in preventative measures against obesity as a result of economic considerations. After researching methods of prevention for obesity from multiple countries, Kumanyika proposed an equity-oriented prevention action framework. This agenda would take into consideration the increased options for healthy foods, the methods for reducing deterrents to health behaviors, the means for improving social and economic resources, and how to empower communities to build community capacity.

## **Physical Activity**

Physical activity has a cardiorespiratory benefit even in those who do not lose weight (Swift et al., 2014). Physical activity has been shown to lower the risk of cardiovascular disease, diabetes, stroke, hypertension, osteoporosis, and certain cancers, as well as reduce stress and elevate mood. Sedentary lifestyles have the opposite effect. Physical activity and exercise are also important for maintaining long-term weight loss and can be beneficial in preserving lean body mass while dieting (CDC, 2017c). A doseresponse relationship has been demonstrated in overweight adults between the amount of exercise and long-term weight loss maintenance (Macera, 2015; World Health Organization, 2017). Nevertheless, the prevalence of inactivity in the United States and other industrialized countries is considerable and consequently directly relevant to the rise in obesity and in associated comorbid conditions. In the United States, fewer than half of all adults meet the U.S. Federal 2008 Physical Activity Guidelines (Flegal et al., 2015). Despite the evidence of the health benefits of physical activity, people worldwide are doing less physical activity at work, at home, and as they travel from place to place. Globally, about one in three people get little, if any, physical activity (Papas et al., 2016).

Increased physical activity is recommended for improving overall health and for facilitating weight control. The Physical Activity Guidelines for Americans from the U.S. Department of Health and Human Services (2018) recommended a minimum of 75 vigorous or 150 moderate activities per week (Arem et al., 2015). For substantial health benefits, the guidelines recommended 150-300 minutes of moderate exercise or 75-150 minutes of vigorous exercise weekly. Additionally, the Institute of Medicine suggested at

least 60 minutes of moderately intense physical activity daily for the prevention of weight gain (National Academies Press, 2015). Irrespective of the recommendation, the average U.S. adult engages in less-than-ideal amounts of daily physical activity as a result of societal, occupational, and personal lifestyle factors (CDC, 2017c).

The American Heart Association's scientific statement on obesity and weight loss recommended weight loss in overweight and obese patients to reduce the severity of cardiovascular risk factors (Macera, 2015). Weight loss in these patients has been associated with improvements in many cardio metabolic risk factors, such as prevalence of metabolic syndrome, insulin resistance, Type 2 diabetes, dyslipidemia, hypertension, pulmonary disease, cardiovascular disease, and inflammation (Wing et al., 2013). Clinically significant weight loss ( $\geq$ 5% of baseline body weight) has been shown to be more effective in reducing cardiovascular disease and Type 2 diabetes risk factors (Wing et al., 2013).

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# Weight Loss

Weight loss programs and weight control strategies must be designed with the social settings and social dynamics of African Americans in mind. Reframing calls for an increased number of African American researchers involved with conducting and shaping the direction for obesity research with a multidisciplinary focus that includes policy makers. Banerjee et al. (2018) examined determinants of successful weight loss in 35 low-income African American women. They determined that factors associated with losing weight were based on motivations for quality of life, family quality of life, health, appearance, opportunity, and adaptability (Banerjee et al., 2018).

### Common Barriers of Choosing a Healthy Diet and Improving Physical Activity

Barriers at the intrapersonal, interpersonal, and community/environmental levels are associated with healthy diets and improving physical activity, both are key concepts of this study's conceptual framework. The emerging themes associated with intrapersonal barriers were: lack of time, physical appearance concerns, health conditions that limit physical activity, lack of knowledge, cost of exercise facilities, lack of motivation, and tiredness/fatigue. At the intrapersonal level, emerging themes included: family/caregiver

responsibilities, lack of someone to exercise with, and general lack of social support.

Community and environmental barriers included neighborhood safety, lack of local facilities for physical activity, weather concerns, lack of sidewalks, and the absence of other African American women as role models for physical activity (Joseph et al., 2015).

The significance of obesity as a problem was captured by Kumanyika et al. (2014), who reported that obesity was a stronger predictor of mortality and morbidity in both children and adults than either poverty or smoking. Satcher (2016), a former Surgeon General, highlighted the significance of the overweight and obesity epidemic affecting children and adults in this nation, with a focus on prevention to address conditions such as poor diet and physical inactivity. He called attention to the disproportionate impact of obesity on minority populations and particularly on African American women (Kumanyika et al., 2014).

Identifying approaches for influencing weight loss among African American women given the shortage of data regarding successful weight loss in this group. To that end, I conducted a phenomenological study exploring the lived experiences of overweight and obese African American women, adding their voices and experiences to the existing body of research on overweightness and obesity. This research will help fill a gap in knowledge regarding the improvement of individual-level interventions. Findings also can inform professional practice and promote social change in terms of quality of life for African American women and their families.

The World Health Organization (2018) reported that physical inactivity is the fourth leading risk factor for global mortality, accounting for 6% of deaths globally. A

more recent analysis of the worldwide burden of disease further estimated that physical inactivity was responsible for 6% of the incidences of coronary heart disease, 7% of Type 2 diabetes cases, 10% of breast cancer incidences, and 10% of colon cancer cases. WHO further concluded that if physical inactivity decreased by 25%, more than 1.3 million deaths could be averted every year (Lee et al., 2014). The causes and risk factors of chronic diseases such as cardiovascular disease, stroke, diabetes, cancer, obesity, and arthritis are well established and documented, with a small set of common risk factors identified as being responsible for most of those chronic diseases. The risk factors of diet, physical inactivity, and tobacco use are modifiable and are the same for both men and women (An, 2015; Patnode et al., 2017).

Satcher (2016) identified two factors contributing to overweight and obesity – the pressure to consume more calories coupled with decreased physical activity. A review of the literature on overweightness and obesity revealed that decreasing the number of calories consumed, increasing physical activity, identifying of social support, and having a sense of self-efficacy contributed to weight loss among the general population (Bastianello et al., 2012; Todd et al., 2015). I contend that there is a compelling need to similarly identify factors that may contribute to weight loss in the population subset of African American women.

# **Obesity Risk Factors for African Americans**

It is reported that that the disproportionately high risk of obesity in African Americans was recognized as problematic well before the emergence of obesity as a critical health issue in the U.S. population as a whole but without the concurrent

development of strategies to reduce obesity levels in the African American population (Kumanyika et al., 2014; Whitt-Glover, 2014). The higher prevalence in African American women of the morbidity and mortality resulting from overweightness and obesity has been reported by Kumanyika et al. (2014) and Ogden et al. (2017), taken from the U.S. National Health and Nutrition Examination Survey.

# Overweight and Obesity in African American Women

The higher obesity rates for African Americans than for members of other ethnic groups necessitates attention and requires action to address the issue. Several researchers have delved further into this phenomenon to gain more understanding of African American women who are at risk for obesity (Barnett & Praetorius, 2017; Huang et al., 2015). Barnett and Praetorius (2017) reported on the experiences of African American women when trying to eat healthy diets and maintain physical activity, using qualitative interpretive meta-synthesis.

Because African American women are disproportionally impacted by overweight and obesity, it is critical to reach a better understanding of the experiences of African American women from an ecological approach that incorporates cultural, social, and economic factors and is geared toward improving interventions for this group. Similar to the multi-level influences of ecological frameworks (individual, community, socioeconomical and policy), the qualitative interpretive meta-synthesis explored the experiences of African American women food and exercise practices from the perspectives of various disciplines (kinesiology, nursing, medicine, public health, health sciences and nutrition). Barnett and Praetorious's (2017) synthesis included 13 studies

from peer-reviewed journals that contained qualitative descriptions of 502 African American women between the ages of 18 and 92 regarding their experiences with diets, physical activity, and weight loss.

Barnett and Praetorious (2017) reported that the results of the synthesized studies suggested that the women had some awareness of the health challenges related to their poor eating habits and lack of exercise. Based on the emerging themes, the authors further suggested that the lack of identified family and structured support were important considerations when designing educational topics, since African American women struggle to gain and sustain support of family and friends. Additionally, acknowledging the importance that African American women place on religion and spirituality reflected in the theme of God as a healer emerged as a critical aspect of designing and implementing educational initiatives and individual/group therapy interventions for improved nutrition and physical activity levels in African American women.

#### **Summary**

Complex, multi-dimensional conditions such as obesity require multipronged approaches. The variables associated with weight loss (i.e., self-efficacy, social support, physical activity, and obesity-related policies) can best be explained through the lenses of social cognitive and ecological frameworks. Social cognitive theory and ecological frameworks incorporate the intrapersonal, interpersonal, cultural, and environmental factors that overweight and obese individuals face. Social cognitive theory incorporates ecological approaches that consider not only adiposity and measurements of BMI, but also a focus on intrapersonal, interpersonal cultural, and environmental influences.

In this chapter, I provided an overview of overweight and obesity on global, national, and local levels. I provided definitions of terms and outlined the parameters of the literature review. The chapter also included details regarding racial and gender differences in obesity and a review of genetic and pharmacological contributions to the epidemic of obesity. In this chapter, I documented reviews of obesity in the general population and among Black women in particular, outlining the assumptions and underlying theoretical frameworks for the study. The chapter also included the research questions, an explanation of the concepts, and details regarding how the theoretical framework supports the concepts. Chapter 3 provides the methodology used for the study, the role of the researcher, information about recruiting participants, data collection, data analysis, trustworthiness, and ethical protection of the participants.

## Chapter 3: Methodology

Using a phenomenological method, the purpose of the study was to explore the lived experiences of obese and overweight Black women and the influence of health policy (specifically the Nutrition Labeling Law), physical activity, and a healthy diet on weight loss efforts among members of this population group. The experiences of African American women using information from nutrition labels to make healthy food choices and engaging in physical activity were the main foundation in this study.

# **Research Questions**

I conducted a qualitative study using phenomenological research involving semistructured interviews. The study addressed the following research questions:

RQ1 1: How does The Nutrition Labeling Law influence the eating behaviors in the everyday lives of overweight and obese African American women?

Subquestion 1: What role does obesity-related policies (such as nutrition labeling reading) play in weight loss in overweight and obese African American women?

Subquestion 2: What barriers do African American women experience when reading nutrition labels in their everyday lives?

RQ2: How do overweight and obese African American women engage in physical activity to lose weight?

RQ3: What are the determinants of weight loss success in African American women?

# **Interview Questions**

Semistructured interviews focused on the primary question: What is your everyday experience of being overweight or obese? Depending on participants' responses, the follow-up questions like those listed here elicited additional data.

- 1. Please share your experience with reading nutrition labels in restaurants, when doing grocery shopping, and when preparing meals at home.
- 2. How do you think that your elected politicians or the government may help with your desire to lose weight?
- Please share who else do you think has helped you with your desire to lose weight.
- 4. Please discuss examples of anything that you think has helped you in your weight loss efforts.
- 5. Please discuss examples of anything that you think interfered with your weight loss efforts.
- 6. Discuss ways in which physical activity affects weight loss in overweightness and obesity.
- 7. Please share your thoughts regarding which factors determine if you lose weight or if you gain weight.

### **Research Design**

The study relied on a qualitative methodology to explore the participants' lived experiences. Qualitative research takes an interpretive approach to human experience and personal perception, making that approach suitable for the present study (Yin, 2016). I

specifically employed a phenomenological design for this inquiry. Phenomenology involves the process of gathering participants' perspectives based on their lived experience of a given phenomenon and learning how participants interpret these experiences (Moustakas, 1994).

The phenomenological approach calls for the identification of noteworthy statements that are then assembled to form larger data sets or themes that, in the case of this current study, illustrated the experiences of overweight or obese African American women, including the specific factors significant in weight loss success for these women. Phenomenology was the approach best suited to describing the lived experiences of African American women experiencing overweightness and obesity. Through a phenomenological approach, researchers can elicit participants' lived experiences while striving to suspend preconceived notions and known information (Yin, 2016). In addition, phenomenological research is used to get at the essence of the phenomenon – in this case, the challenges involved in losing weight and the needed supports for losing weight, including obesity-related policy changes (Moustakas, 1994).

### Phenomenology

Phenomenology was my chosen research design for this study. I deemed phenomenology to be the most appropriate research design, given my objective of examining overweight and obese African American women and their lived experiences. This study, therefore, was guided by qualitative phenomenology, using a constructivist lens. This researcher's underlying assumption is that all phenomena cannot be explained through a purely objective worldview of positivism and empiricism. Qualitative research,

using a constructivist paradigm, is congruent with the belief that reality is not a fixed entity, but is contextual and varied, based on the experiences of the individuals participating in the research.

Constructivism is one orientation to research, and the one I employed here. I adopted a constructivist paradigm for this study, in keeping with the work of Polit and Beck (2008) and based on an ontology that reality is constructed by individuals, is subjective, and has multiple facets. Polit and Beck noted that "the voices and interpretations of those under study are crucial to understanding the phenomenon of interest, and subjective interactions are the best way to assess them" (p. 8). In the context of this study, the phenomenon was the lived experiences of overweight and obese African American women regarding weight loss.

There are many designs within the qualitative method. Of the different approaches of qualitative inquiries offered by previous researchers (Creswell, 2013; Starks & Trinidad, 2009; Trainor & Graue, 2013) phenomenology is the approach best suited for understanding lived experiences of individuals. Phenomenology is a philosophy and method of inquiry based on the premise that reality consists of objects and events as they are perceived or understood in human consciousness and that reality is not independent of human consciousness. A movement based on this was originated by Edmund Husserl (Christensen et al., 2017). The philosophy of phenomenology can be traced to Frantz Brentano, who lived from 1838 to 1917. Brentano was a philosopher and psychologist who taught at the University of Vienna best known for reintroducing the scholastic

concept of intentionality into philosophy and proclaiming it as the characteristic mark of the mental. Husserl was influenced by this early philosopher (Dowling, 2005).

Husserl's development of phenomenology was based on Brentano's use of the phrase descriptive psychology or descriptive phenomenology (Dowling, 2005). Valle et al. (1989) reported that for Husserl, the aim of phenomenology is the rigorous and unbiased study of things as they appear in order to arrive at an essential understanding of human-consciousness and experience (Dowling, 2005). Also, phenomenological reduction and phenomenological research are essential parts of the philosophy of phenomenology. Careful consideration has to be given to phenomenological reduction (bracketing), as described by Husserl (1913/1962). A researcher's preconceived notions regarding the phenomenon must be identified, acknowledged, and examined as the research begins and progresses to come to know the phenomenon as described by the participants. Lived experiences represent the immediate the immediate, pre-reflective consciousness of life; Moran (2000) stated that such experiences were an attempt to understand the experience or the phenomena as free as possible from cultured context. The individual must understand the phenomenon from within before it can be explained. The essence is to make known what is in the immediate consciousness of the person before it can be reflected on.

Historically, philosophers did not develop or invent research methodology, many perspectives and approached are rooted in their works. Fleming et al. (2003) reported that none of the phenomenological philosophers developed research methods, but that their philosophies have often been used to fortify contemporary qualitative research. Husserl is

credited with having found an empirical philosophy which is both a descriptive method and *a priori* philosophical science derived from the method (Colaizzi, 1978).

There are several acceptable approaches to phenomenological analysis. For this study, I chose Colaizzi's (1987) steps to phenomenological analysis. Dowling (2005) referred to the work of van Kaam et al. in describing steps in the methodological approach to phenomenology: (a) the original descriptions are divided into units, (b) units are transformed by the researcher into meanings that are expressed in psychological and phenomenological concepts, and (c) these transformations are combined to create a general description of the experience. I used Colaizzi's (1978) Husserl-inspired phenomenological approach for my study. Colaizzi asserted that the phenomenologist must obtain a description of the experience from participants by direct questions. I used Colaizzi's seven-step phenomenological analytic method, which is described in the data analysis section of this chapter.

#### The Role of the Researcher

As the researcher, I served in several roles in this study. The assumptions undergirding my approach to research are shaped by my professional discipline of nursing, which subscribes to the paradigm—to a set of concepts and rules—that relates to health, the environment, and the person (Rodgers, 2005). The assumptions of this study are (a) that overweight and obesity are preventable conditions and (b) that the lived experiences and perspectives of overweight and obese African American women can inform future research. Through this qualitative study, I aimed to add the voices of overweight and obese African American women on their weight loss experiences to the

current literature on weight loss. As a qualitative study, this inquiry was undertaken with an assumption that that there are different ways of understanding the phenomenon of overweight and obesity in African American women. Polit and Beck (2008) suggested that that the subjective experiences of those undergoing the phenomenon supports the naturalistic paradigm that many constructions of reality are possible. Another assumption of this study is that individual responsibility is important, but to think that weight loss can be explained by just having overweight and obese African American women engage in physical activity or dieting is reductionist and limiting.

# **Participants of the Study**

Study participants consisted of 12 African American women between the ages of 25 and 50 years old. This sample size was supported by Creswell (2013) and Polit and Beck (2008), who contended that a relatively small number of participants are required for gathering adequate data for qualitative research. The sample design for this study, as with most qualitative studies, was emergent, and I predicated the direction of the study on emerging themes. Using semistructured interviews, several themes were generated from a sample of 12 participants.

### **Participant Protection & Ethical Issues**

Ethical protection of participants is important in any study. I obtained approval from Walden University's Institutional Review Board (#05-18-21-0235599) before proceeding with the study. Participants were asked to complete both the informed consent form and release of information form prior to filling out the survey. I followed the guidelines outlined by Polit and Beck (2008). Study participants were not subjected to

physical harm and were informed of their right to refuse to participate or to withdraw at any time. I took all possible measures to safeguard the participants' privacy. Pseudonyms were used to protect the identity of the participants. Transcripts will be kept in a locked file cabinet. The role of researcher was clearly delineated. Participants had the opportunity to ask for clarity throughout the study.

Considering Covid19 pandemic, the recruitment method this study was changed to use of the internet for participant selection. A review of the literature showed that Facebook is a cost-efficient methodology that provided a fast turnaround for recruiting participants. Facebook offers researchers opportunities to connect with hard to reach populations, whether for direct data collection or for recruitment of in-depth interviews. Facebook's huge membership pool, reported over 160 million U.S. citizens used Facebook (Murphy, 2015).

A recent study reported the use of Facebook to conduct qualitative research investigating the policy implications of gray divorce (divorce at or over 50 years old). Weiner et al. (2017) informed this research approach of using social networking to recruit a population of overweight and obese African American women on their experience of nutrition labeling policy and exercise during a pandemic (COVID 19). The initial research method for this current research study was planned as face-to-face interviews. Over 13 days, Weiner et al. turned to Facebook to recruit 178 respondents, from which 80 participants were recruited for a qualitative study. The characteristics of the Facebook users' recruiter for Weiner's study were specific, with focus to geography, age group, gender, placement of advertisement (mobile device and desktop).

A review of the literature showed there are increasingly new opportunities for researchers to recruit study participants on social media websites. The performance of four online resources for recruiting iPhone users to participate in a web survey was discussed by Antoun et al. (2015). A methodological study, using convenience sampling was conducted to collect data regarding the quality of survey data collected in voice and text messages from iPhones users. The four online resources were characterized as those who pull and those who push. Craigslist, and Mechanical Turk are examples of websites that pull, meaning that they pull in online users actively looking for paid work. Examples of websites that push are Google Ad Works and Facebook, meaning that they attract online users engaged in other, unrelated activities.

The findings of Antoun et al. (2015), showed that the pull method recruits were more cost efficient and committed to the survey task. The push method recruits were more demographically diverse (Antoun et al., 2015, p. 232). Of particular interest for me, a qualitative researcher, was that recruits on the M Turk website believed that they would not get paid unless they completed the entire task, answering all survey questions. Participants were compensated for their time by giving them a choice to participate in a lottery for two or three gift certificates related to weight management.

### **Data Collection**

Researchers chose the most effective interviews for their studies. Creswell (2013) stated that researchers determine what type of interview (i.e., telephone interviews, focus group interviews, or a one-on-one interviews) will yield the most useful information to answer the research question. I therefore conducted individual interviews via telephone

with overweight and obese African American, English-speaking women between the ages of 25 and 65 years. Participants with a medical diagnosis associated with losing weight were excluded from participation. Recruitment was done with a flyer posted on the platform Next Door and on the website of a local church. The inclusion criteria were English speaking Black women between the ages of 25-65 years who live in one of the five boroughs of New York City who experienced overweight or obesity within the past year, have read nutrition labels, and were involved in physical activity. I obtained consent from each participant.

I verified eligibility before setting up interviews. A screening questionnaire was developed to gather basic demographic data relevant to this study. History variables such as length of time in a weight loss program, length of time involved with losing weight, or number of programs attended were obtained via demographic questionnaires as well. I also gathered basic self-reported information regarding weight and height via the screening questionnaire (see Appendix A).

The data collection approach for this study followed the principles of phenomenological research paradigm, using interviews. The in-depth individual interviews were guided by semistructured, open ended questions. Interviews for those who met study criteria were audiotaped, transcribed, and analyzed based on the work of Colaizzi (1978). Interview notes were also taken. I obtained recording consent from participants and gave participants an opportunity to hear their recordings, review summaries of the handwritten notes, and offer clarification or amendments of the material.

## Sampling

I relied on purposeful sampling to recruit participants for this qualitative study. I used purposive sampling based on availability and accessibility of women who met the age, race, and weight criteria. Purposeful sampling was used based on availability and accessibility of women who met the age, race and weight criteria and who self-reported being overweight or obese within the past year.

Recruitment from various settings should have yielded individuals who were rich sources of information. It was suggested that recruitment strategies for research ranging from random sampling to more selective purposive sampling might find the demographics of the Internet acceptable or at least as good as those available from any particular recruitment site (Hamilton & Bowers, 2006). When determining recruitment and sampling for qualitative research, Morse et al. (2002) identified two guiding principles: appropriateness and adequacy.

Additional procedures for collecting data and describing the study findings included the following:

- 1. Posting the recruitment flyer, with specific inclusion criteria on Facebook.
- 2. Setting up hyperlinks on a recruitment flyer to trigger those who meet inclusion criteria to gain access and complete the screening questionnaire.
- Setting up designated telephone number and or email address to which interested participants should have responded regarding their interest to participate in the study.

- 4. Finding interested participants who met criteria and expressed interest in participating in the study (by completing the screening questionnaire).
- 5. The screening questionnaire was reviewed by me and BMI calculated, based on reported weight and height. Calculating the BMI determined if participants were eligible, based on meeting the BMI requirements to be considered overweight or obese.
- 6. Participants were asked to complete the consent form for the interview and for permission to audiotape the interview. The consent form was acknowledged by each participant after reviewing the flyer and following the instructions to click on the hyperlink to access the consent and the screening survey.
- 7. Schedules (of 1 hour duration) were set for each participant and me to have an audio-taped telephone interview.
- 8. Appointments were scheduled within a 2-3 week period with 12 participants who met the study criteria and BMI requirements for overweight and obesity.
- 9. Participants were encouraged to ask questions regarding the research.
- 10. Individual interviews were audiotaped.
- 11. In addition to audiotaping, handwritten notes were generated during the interviews.

### **Data Analysis**

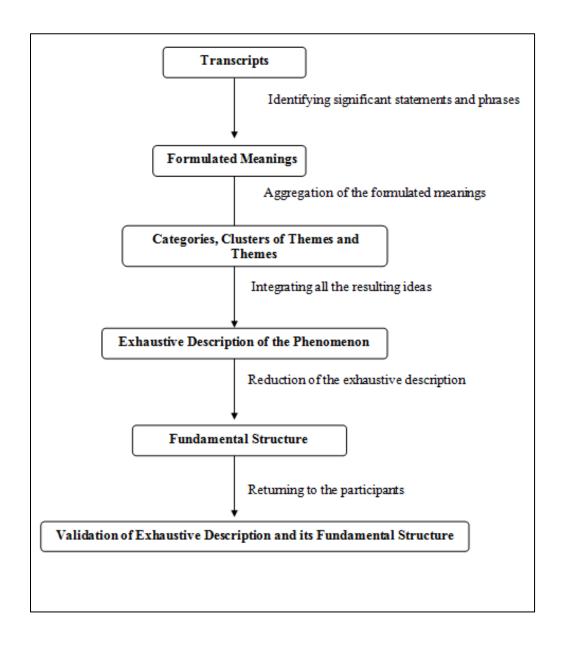
For this study, I employed the descriptive phenomenological analytical method based on Colaizzi's (1978) work. This method was in keeping with the epistemology of phenomenology. Colaizzi's method is a detailed guide that provides an exhaustive

description of the phenomenon. Interviews were audiotaped and transcribed using the steps outlined in Figure 4. I followed Colaizzi's seven steps for data analysis as listed next, as cited by Polit and Beck (2008), and as shown in Figure 2.

- Reading and rereading of transcripts to gain an understanding of the entire content. The audio-taped conversation for each participant were transcribed, capturing the essence of the participant's conversation.
- Extracting significant statements that pertain to the phenomenon under study, listing the statements on a separate sheet of paper, noting their pages and line numbers.
- 3. Formulating meanings from these significant statements. I attempted to formulate more general restatements or meanings for each significant statement extracted from the participant's recording.
- 4. Sorting the formulated meanings into categories, cluster of themes and themes common to all of the participants' transcripts using carefully done coding.
- 5. Integrating the findings of the study into an in-depth exhaustive description of the phenomenon under study.
- Describing the fundamental structure of the phenomenon as precisely as possible.
- 7. Validating the findings with the research participants to compare my descriptive results with their lived experiences.

Figure 3

Colaizzi's (1978) Strategy for Phenomenological Data Analysis



#### **Trustworthiness**

Critics of qualitative research sometimes raise the question of rigor and scientific excellence, and this may be considered a limitation. Internal and external validity and reliability are the trademarks of quantitative studies. In this qualitative study, I used Lincoln and Guba's four criteria framework as outlined by Polit and Beck (2008). Polit and Beck discussed methods of enhancing trustworthiness in qualitative research. The attention of a qualitative researcher should be focused on dependability, confirmability, credibility, and transferability in order to enhance the trustworthiness of a qualitative study. Dependability refers to evidence that is consistent and stable. Confirmability is the degree to which the study results come from the characteristics of the participants and not from the bias of the researcher.

Credibility addresses the robustness of the research method. The research method should engender confidence in the truth of the data, as well as in the researcher's interpretation of the data (Polit & Beck, 2008). Polit and Beck posited that high-quality qualitative research is driven by methods and methodology, but is that it also it is equally important to know who the researchers are, the researchers' world views and researcher's assumptions, ontology and epistemology. The authors identified six attributes that researchers should be committed to, to produce high quality qualitative research, namely: commitment to transparency, commitment to absorption and diligence, commitment to verification, commitment to reflectivity, commitment to participant-driven inquiry and commitment to insightful interpretation.

I used member checking and peer review as important verification tools. At the onset of the telephone interview, the participants were thanked for giving permission to be interviewed, audiotaped and to allow me to take notes. I shared with the participants that the notes being taken were to be read back to them during the interview to verify accuracy and completeness of the information that they share. Throughout the research, I shared emergent themes with the participants and requested their input on whether the findings were congruent with their experiences. The feedback and responses of the participants were included in the study's documentation. An experienced qualitative researcher from the State University of New York in Brooklyn served as the second reader of the transcribed audiotaped text.

## Survey

A screening questionnaire was used based on a review of current literature. Basic demographic information, such as age, ethnicity, marital status, income, education, parenting status and, religion/spirituality were also obtained.

# **Summary and Conclusion**

The main points of this chapter centered on re-acquainting the reader with the problem statement and the study's introduction. I also discussed the research questions, the phenomenon being studied, the research tradition, and study rationale. This chapter also presented details regarding study methodology, including sampling, data collection, data analysis and satisfying IRB requirements. A flow chart included in this chapter illustrates the sequence of steps involved in data analysis. The chapter also addressed issues of rigor focused on trustworthiness for qualitative research. Chapter 4 reveals the

findings of the study, five themes and subthemes that arose from the semistructured interviews.

## Chapter 4: Results

Using a qualitative research design, the purpose of the study was to explore the lived experiences of obese and overweight Black women and the influence of health policy (specifically the Nutrition Labeling Law), physical activity, and a healthy diet on weight loss efforts among members of this population group. Through this study, the experiences and voices of Black women were introduced by exploring their views on the aforementioned influences on weight loss. The research questions for the study were as follows:

RQ1: How does The Nutrition Labeling Law influence the eating behaviors in the everyday lives of overweight and obese African American women?

Subquestion 1: What role does obesity-related policies (such as nutrition labeling reading) play in weight loss in overweight and obese African American women?

Subquestion 2: What barriers do African American women experience when reading nutrition labels in their everyday lives?

RQ2: How do overweight and obese African American women engage in physical activity to lose weight?

RQ3: What are the determinants of weight loss success in African American women?

This chapter summarizes data collection and barriers encountered during the data collection process. The setting, demographics, and data analysis are outlined based on Colazzi's seven step phenomenological analysis.

## **Research Setting**

After approval by Walden's IRB (#05-18-21-0235599), I conducted the interviews by telephone, which were tape recorded. They were scheduled with the participants, based on availability, in a setting in which they felt comfortable, primarily in their own homes, particularly due to the COVID19 pandemic, which scuttled the original plans to recruit from local gyms, beauty shops, and churches. Further details on recruitment are in the data collection section.

# **Demographics**

The participants were self-identified overweight or obese English speaking African American women, between the ages of 25-65 who live in one of the five boroughs of New York City. I interviewed 12 African American women who had experiences with overweight and obesity, as indicated in Appendix A.

# **Data Collection**

Data collection was done through telephone interviews for 12 women. The initial posting of the recruitment flyer on a local neighbor forum, Nextdoor yielded two participants. I had to request permission from the IRB to recruit from all five boroughs of New York City, not just from the borough of Brooklyn, which provided some traction, in that I gained an additional two participants. Again, I reached out to the IRB requesting permission to identify other sites from which I could recruit, specifically local churches. The initial posting on the webpage of the church did not yield an adequate response rate to achieve the sample size for the study, which prompted me appeal to Walden's IRB again, this time seeking permission to increase the age range from 25-50 to 25-65 years.

IRB permission was granted. I was able to reach out to a local church to explain my study and to ask if they would post my flyer on their church website. The leadership of the church was interested in my topic and offered to post my recruitment flyer. The church has women categorized by age into certain groups. Interviews were conducted online and audiotaped. After having recruited the participants, they answered a presurvey before the interview. I used bracketing throughout the research process to control for researcher bias (Chan et al., 2013). Bracketing is used in phenomenological studies so researchers can overcome previous knowledge, insights, and subjective viewpoints of a phenomenon they are investigating (Chan et al., 2013). Reflexivity, self-awareness, curiosity, and openness were also employed through keeping a reflective journal (Hamill & Sinclair, 2010). Using member checking, I contacted the participants after the interview and provided them with written transcripts for veracity. Each one was transcribed into Word documents, yielding 120 hours of interviews.

In this study, I used the following steps for data collection based on the research genre of phenomenology. Also, see Figure 4 for a flow chart that graphically depicts the data collection process. Phenomenology is considered the appropriate approach to explore the lived experience of individuals.

- Data collection was done through telephone interviews (audio-taped) for 12 women.
- A recruitment flyer was prepared (Appendix E) and posted on a local neighbor forum, Next Door and on the website of a local church to recruit participants for

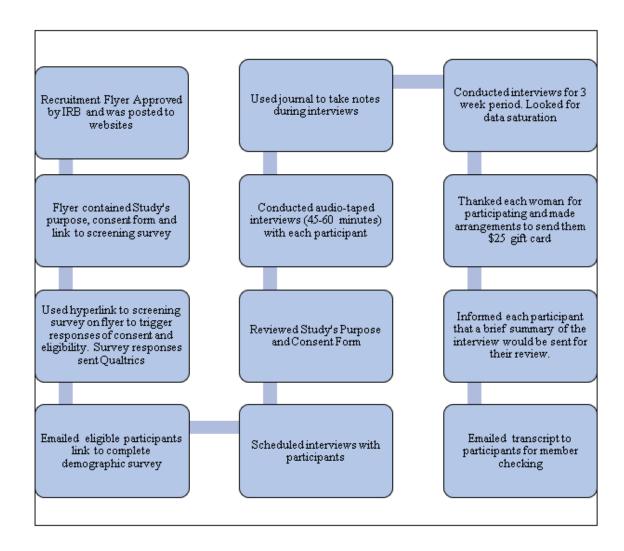
the study. The recruitment phase lasted about three months due to COVID and low response through the online Nextdoor Platform.

I took the following steps for participant recruitment and data collection:

- I gave instructions on the flyer describing the study's purpose, with a hyperlink to
  the consent form and the screening survey to determine eligibility (see Appendix
  E).
- 2. The Qualtrics platform was used for surveys allowed me to identify participants who signed consent form and met inclusion criteria, with their emails.
- 3. I emailed a link to access the demographic questionnaire (see Appendix A) to participants inviting them to complete demographic survey with instructions that upon completion I would reach out to schedule a mutually agreed time to conduct an interview of about 1 hour duration.
- 4. I contacted participants, based on preference of email or telephone to schedule the telephone interviews. Participants were reminded again, that based on the flyer and consent form, the interviews would be audio taped.
- 5. I conducted on-line interviews, using semistructured questions, with a preprepared interview guide (see Appendix B). Privacy and confidentially were ensured, I was in a den with closed doors, to which no one else had access during the interviews.

Figure 4

Data Collection Process



- 6. The interviews were conducted and audio taped, as scheduled for each participant, with a duration of 45-60 minutes per interview, based on research, interviews and follow up questions (see Appendices B and C). As a part of Colazzi's method, there is a combination of data collection and analysis that occurs simultaneously. During each interview, I took notes to capture potential themes, voice and passion of participants, tone, and level of engagement and expression of emotions.
- 7. The transcription of each interview averaged 10 hours—done by professional transcription service.
- 8. The interviews were conducted over a 3-week-period.
- 9. Participants were informed that I would email them a summary of the interviews and study findings and to make sure that the study findings reflected their own experiences (see also Figure 4 for a graphic illustration of the data collection process).
- 10. I emailed a summary of the interviews and study findings for participants' review and feedback.

### **Data Analysis**

Data analysis for this study was modeled after Colaizzi's (1978) seven step approach, employing descriptive phenomenological analysis, a method in keeping with the epistemology of phenomenology. Colaizzi's method is a detailed guide that provides an exhaustive description of the phenomenon. Examination of the 12 participants' transcripts uncovered 417 significant statements, and meanings were formulated for each. Examples of significant statements and their formulated meanings are found on the

demographic table in the appendices. I selected 56 statements that supported the themes presented on RQ1 and its three Subquestions, 27 statements for RQ2, and 56 for RQ3. Clustering helped to formulate meanings which resulted in two identified themes for RQ1, three identified themes for Subquestion 1 and one for Subquestion 2. RQ2 had one identified theme and RQ3 included five identified themes; two of them had two subthemes. See Figure 5 for a flow chart of the data analysis process based on Colaizzi (1978).

After thoroughly analyzing the data, the following six themes arose, all of which were closely aligned with the research and interview questions: (a) perceptions including the subthemes of self-perceptions and others' perceptions; (b) nutritional knowledge; (c) public policies to help with weight loss; (d) physical activity to lose weight; (e) weight management support systems including the four subthemes of nutritional support, social support, emotional support, and virtual support, and (f) factors that interfere with or support weight loss.

The participants' transcripts were analyzed to extract significant statements.

Meanings were formulated for each significant statement. Data from the interviews were analyzed using the method established by Colaizzi (1978), which included the following steps:

- 1. The formulated meanings were organized into clusters of themes.
- 2. An exhaustive description of the investigated phenomenon was written.
- 3. The fundamental structure of the phenomenon was identified.

Figure 5

# Colaizzi Phenomenology Data Analysis Process

- Step 1: Reading and rereading each transcript for general sense of whole
- Read the transcripts several times for significant statements and reflected on interview notes and participant voices
- Step 2: Extracting significant statementspertaining to phenomenon and recording page and line numbers
- Extracted significant statements/phrases based on key
  constructs of theoretical framework; used journal for
  key statements from participants; read through at least
  three times to find energing categories → themes
- Step 3: Formulating meanings from significant statements
- Coded demographic profiles for variations (education, age, income, BMI, etc.) to add context to statements; analyzed transcripts, notes, and significant statements for common statements/ expressions & grouped/organized; examined all transcripts and found 417 significant statements from which meanings were formulated
- Step 4: Sorting formulated meanings into categories, theme clusters, and themes
- Grouped formulated meanings into categories from which cluster of themes emerged to form six distinctive themes; selected 56 statements supporting themes in RQ1 with three subquestions, 27 from RQ2, and 56 for RQ3
- Step 5: Integrating study findings into exhaustive description of study phenomenon
- Defined emergent themes into exhaustive description of everyday lived experiences of overweight and obese African American women with reading mutrition labels and engaging in physical activity for weight loss; found six themes from data analysis closely aligned with research/interview question.
- Step 6: Describing the fundamental structure of the phenomenon
- Reviewed the clusters of categories and the extracted themes and eliminated ambiguous structures, allowing tweaking of redundancy/misused descriptors
- Step 7: Seeking validation of finding from research participants to compare descriptive results with their experiences
- Used member checking technique to validate findings with the
  participants by emailing each participant a summary of
  emerging themes to read and respond to with any additions or
  darifications; allowed each participant to review the findings
  and confirmed fundamental structure identified was
  descriptive her experience

- 4. The participants read and validated the findings.
- 5. Any additions or deletions based on the participants' feedback was made to the fundamental structure.

A detailed description of the participants based on their interview responses and the presurvey was presented, and fundamental structured differences emerged. Coding (Figure 4, step 3) was done carefully to reflect the significant characteristics of the participants. After analysis, congruent with the Colaizzi method, each participant reviewed the findings and confirmed that the fundamental structure identified was descriptive of her experience. No additions or deletions were required.

To analyze the recorded data, the interviews were first transcribed word for word. It took 10 hours to transcribe each participant's interview. Subsequently, I listened to the recordings to improve the accuracy and reliability of the data. Written transcripts were sent to the participants to review for accuracy, which gave them a chance to comment more.

The data were analyzed using the method Colaizzi described, with data collection and analysis circularly taking place. In the first stage of the analysis, I read the transcribed data several times, focusing on the context of the data and participant responses and selected significant statements. Then, similar expressions were grouped and organized among the extracted statements, and they were reconstructed in a more abstract fashion. This step was followed by the extraction of a theme by similar grouping content significant statements, and similar themes were grouped and categorized into

themes with high abstractness. Data collection and analysis were performed simultaneously.

I conducted 12 interviews as suggested on the proposal. However, theoretical saturation was achieved by the individual eight such that no new contents appeared in the interviews and the same type of concepts and themes emerged in the data analysis. To ensure rigor in this qualitative study, I began with open-ended questions and allowed participants to talk about their experiences freely in their own language. In addition to improving the research results credibility, I confirmed with the participants via email if the results coincided with their experiences. Fittingness was established based on indepth data collection until saturation. Then, I extracted significant ideas from participants' descriptions of specific and vivid experiences.

I confirmed that insights and data were not contradictory and that a possible conclusion could be drawn. Participants answered a presurvey before the interview. I contacted them after the interview and provided them with written transcripts for veracity. I confirmed whether a neutral position was maintained, and results were obtained without investigator participation. In this study, I cited the participants' comments so that the reader could verify the interpretation and analysis of the data. Finally, all study participants reviewed the summary of the study results to verify if they captured the essence of their experiences.

The code book was done in detail in which categories and themes illustrated the initial coding of the transcribed recordings as just described, using Collazi's 7 step approach to data analysis. The code book of categories and themes described the 12

participants, using letters of the alphabet to represent reported demographics such as BMI, marital status, education, income, reason for losing weight, health, physical activity per day, physical activity per week, and knowledge of nutrition label. A description was then created, as reflected for each participant. Using Collazi's method and referencing the work of Miles et al. (2020), the categories emerged from the supporting statements from participants. The following list represents how I used Colaizzi's (1979) process for phenomenological data analysis:

- 1. Each transcript should be read and re-read in order to obtain a general sense about the whole content.
  - I read each of the transcribed interviews (transcripts) several times focusing
    on the content of the data and participant responses and selected significant
    statements.
  - I reflected on the notes taken during the interviews, as well as on the voice of each participant.
- For each transcript, significant statements that pertain to the phenomenon under study should be extracted. These statements must be recorded on a separate sheet noting their pages and lines numbers.
  - I extracted significant statements and phrases from each transcript based this study's theoretical framework (SEMFPAD). The key levels of the model are

    (a) social and cultural norms (belief systems, religion, body image, traditions);

    (b) sectors (policy and government); (c) Settings (recreational facilities, home); (d) Individual (demographics, race/ethnicity, psychosocial, genes,

food preferences). A journal was used to record key statements on separate pages for each participant and transcript page and line numbers were notated for tracking purposes. Colazzi's method requires that transcripts be read and reread until emerging categories or themes began to surface. I read each interview a minimum of three times to identify emerging of categories an exemplars that support each emerging theme.

- 3. Meanings should be formulated from these significant statements.
  - I coded the demographic profile of each participant looking for variations such as education, age, income, BMI, etc. that may have added context to the statements made by participants during the interview (see Appendix F).
  - Interview transcripts, notes and significant statements were analyzed looking for common statements and expressions across the participant responses.
     These similar expressions were then grouped and organized using statements made by participants.
  - Examination of the 12 participants' transcripts uncovered 417 significant statements, and meanings were formulated for each group of similar statements. To determine meanings of the significant statements, I reflected on interview statements, voice of participants, and knowledge of the research literature to assign meaning to the identified categories of significant statements. Examples of significant statements and their formulated meanings are found in the participant demographics (see Appendix F).

- 4. The formulated meanings should be sorted into categories, clusters of themes, and themes.
  - I grouped the formulated meanings into categories. From an analysis of the categories, a cluster of themes emerged allowing the formation of distinctive themes, based on the individual quotes in the code/category theme table. The clusters of categories formed six themes (see Table 1).
  - I selected 56 statements that supported the themes presented on RQ1 and its three subquestions, 27 statements for RQ2, and 56 for RQ3.
- 5. The findings of the study should be integrated into an exhaustive description of the phenomenon under study.
  - The six emergent themes were defined into an exhaustive description to show
    the everyday lived experiences of overweight and obese African American
    women with reading nutrition label and engaging in physical activity to lose
    weight.
  - After thoroughly analyzing the data, the following six themes arose, all of which were closely aligned with the research and interview questions: (a) perceptions including the subthemes of self-perceptions and others' perceptions; (b) nutritional knowledge; (c) public policies to help with weight loss; (d) physical activity to lose weight; (e) weight management support systems including the four subthemes of nutritional support, social support, emotional support, and virtual support; and (f) factors that interfere with or support weight loss (see Table 1).

**Table 1**Themes Connected to Research and Interview Questions

Research question (RQ)	Interview question (IQ)	Categories	Themes	Sub-theme
RQ1, How Nutrition Labeling Law affects everyday lives	IQ1, everyday experiences of being overweight or obese	Emotional challenges.  Health challenges. Fitting.	1. Perceptions	Self-perceptions
		C		Others' perceptions
	IQ2, Nutrition labeling laws	How labels are used Where used	2. Nutritional knowledge	
	IQ3, public policies	Physical activity Support	3. Public policies to help with weight loss	
		Affordable healthy food		
		Better labeling regulations		
		Lack of trust.		
RQ2, How African American women use physical activity to lose weight	IQ4, physical activity to lose weight	Walk Other than Walk	4. Physical activity to lose weight	y
RQ3, Determinants of weight loss in African American women	IQ5, how others can or have helped with weight loss	Social Emotional Support Virtual Support	5. Weight management support system	s

(table continues)

Research question (RQ)	Interview question (IQ)	Categories	Themes	Sub-theme
	IQ6, examples of anything that has helped with desire to lose weight	Self-efficacy Stress Management	6. Factors that interfere with or support weight	
		Social Support	loss	
		Environment		
		Black Woman realities		
		Knowledge:		
		Acquisition		
		Knowledge of Nutrition		
	IQ7, what else		Factors that	
	has helped with		interfere with or	
	weight loss		support weight loss	
	IQ8, examples of		Factors that	
	anything that		interfere with or	
	might have interfered with		support weight loss	
	weight loss		1055	
	IQ9, thoughts		Factors that	
	regarding factors that determine if		interfere with or	
	weight is lost or		support weight loss	
	gained			

- 6. The fundamental structure of the phenomenon should be described.
  - I reviewed the clusters of categories and the extracted themes and eliminated
    any ambiguous structures that had more than one intended meaning by
    rereading the categories three times. This review of findings allowed me to
    tweak redundancy, misused descriptors.
- 7. Finally, validation of the findings should be sought from the research participants to compare my descriptive results with their experiences.
  - I used member checking technique to validate findings with the participants
     (as described by Colaizzi, 1979). I emailed each participant a summary of the
     themes that emerged from the research, providing an opportunity for them to
     read and to respond with anything additional that they wanted to add or
     clarify.
  - After analysis, congruent with the Colaizzi method, each participant reviewed
    the findings and confirmed that the fundamental structure identified was
    descriptive of her experience. No additions or deletions were required.

#### **Evidence of Trustworthiness**

In this qualitative study, I used Lincoln and Guba's (1985) four criteria framework: credibility, transferability, dependability, and confirmability to enhance the trustworthiness of this qualitative study. I used reflective journaling, audio-taping, audit trails, and member checking.

# Credibility

I used semistructured interviews, with follow-up sub questions to provide an opportunity for the participant and the interviewer to seek clarification during the interview. I used member checking, spending additional time with each participant.

Lincoln and Guba (1985) stated that "member checks, whereby data, analytics categories, interpretations, and the conclusions are tested with members of those stockholding groups from whom the data were originally collected, is the most crucial technique for stabling credibility" (p. 314). Saturation was reached after reading, coding, and categorizing eight transcripts though I worked with all 12.

# **Transferability**

First, I addressed transferability, which refers to whether or not the results can be applied to other settings. I cannot speak to the transferability of this study. Still, the thick rich data presented in the data analysis of the study offers an opportunity to make transferability judgements possible.

# **Dependability**

I also addressed dependability. The data sources for this study, screening and weight loss surveys on the Qualtrics platform, interview recordings, transcribed interviews, coding steps, and audit trails are available. In addition, the steps outlined above for credibility (validity) establishes dependability (reliability) for this study.

#### Confirmability

Finally, I addressed the confirmability of the results. Throughout data collection and data analysis, I used reflective journaling, bracketing, and audit trail to establish

confirmability for this study. Confirmability is the degree to which the study results come from the characteristics of the participants and not from the bias of the researcher.

#### **Study Results**

The results of the study are arranged by research question (RQ). Under each research question are the interview questions (IQs) that fall under that category.

# **RQ1: How Nutrition Labeling Law Influences Eating Behaviors**

The first research question (RQ) involved how labeling law influences eating behaviors in overweight and obese African Americans' everyday lives: How does the nutrition labeling law influence eating behaviors in overweight and obese African Americans' everyday lives? Three interview questions (IQs) were asked to address the first research question.

# IQ1: Everyday Experience in Being Overweight and Obese

In the first interview question, "Please discuss what your everyday experience is of being overweight or obese?" I wanted the participants to go right to the heart of their own experiences. Some gave substantive answers and others went right into the other interview questions. P1 answered the question about her experiences in great detail. She said that in addition to thinking every day about what she wanted to wear, she would be concerned about her health: "And one of the things I found myself preoccupied with and like how can I put this? Like feeling tired and feeling heavy." She stated, "Sometimes I'm reminded of the things I used to be able to do I can no longer do because of the things I feel in my body, like the aches and pains now that I'm heavier."

P1 also talked about perception: "And I can just explain one recent, well, it wasn't an everyday experience, but it also like how I'm perceived, because I'm heavy. Like sometimes taking more care or like being very conscious of the way I'm dressed." She wonders if her clothing is "size appropriate or whether it highlights or whether or not [she looks] too messy." She makes sure her nails and hair are done because she does not "want to be perceived as like unpretty, no, here's the thing." While no one has "ever said these things" to her or treated her differently, she perceives different things compared to how she was treated before.

P2 felt her experiences were "more of a mental thing." She noted that people put on themselves the responsibility of having "to do something," but also felt not present with "being comfortable, comfortable around others, comfortable with in your own skin." P2 added, "I think society as well, you know, we put expectations on each other."

P3 claimed she was "fine on all the activities of daily living." She said she got around well though taking the subway stairs made her a "little tired..." She also mentioned that people look similarly at her when she was "eating something that they determined [she] shouldn't be eating." P4 saw weight maintenance as a "hard struggle." She continued, "It's a hard struggle to maintain my weight because sometimes you go down, it's like fluctuating you know, up and down, like sometimes you're doing everything that I can, my disease, to help my disease." She concluded, "Yes, it is a struggle. It's a hard struggle for me personally, the hard struggle."

P5 discussed her difficulty in doing "regular activities." She went on: "It just creates more difficulty in terms of doing everyday things. It makes it a little bit more

strenuous than it used to be. Sometimes I get tired quicker, that type of thing." P6 was "still in denial about being overweight" because she had been scared all her life. So, she stated, "I try to maintain at least 150; however, that hasn't been working; I was at that weight sometime in June and now I'm back up to 170." P7 felt "challenged." She talked about trying to maintain and lose weight but "also be mindful of [her] eating habits." It was not always easy but "every day is different." She acknowledged, "And so there are times when I don't get to eat lunch and then I find myself snacking. There are times when I come home and I'm pretty tired and I don't cook an adequate meal." She concluded, "And then there are times when I recognize I've recently come to recognize when I'm experiencing emotional eating."

P8 described her experience as an everyday focus on weight reduction: "Well, my everyday experience being overweight is a sense of wanting to be smaller, at least that's what goes through my head. I don't want to get any larger, I don't want to have to buy new clothes." She remembered that "every time [she] went up a little" and tried on clothes, she got upset. She added, "That makes it really uncomfortable. I just like to be at the weight that I felt much better about." P9 emphasized the fatigue and the "wear and tear of [her] body." She continued: "And that is my biggest issue and I've had arthritis in the knees, so that is one of the biggest things and just trying to manage it." P10 guessed that when she had the extra weight she did not realize until after she lost it, that she lacked enthusiasm about going out, seeing her friends and was frustrated that "nothing fit" and she really did not like her face, which "was a big thing." She wondered why her

face was so big and remembered after she lost the weight that her father called that kind of face a "moon face."

P11 said that her everyday experience would "be better than others in [her] situation." She didn't really let it affect her everyday life, not physically. She was, however, concerned "just the loose skin in some areas," mainly in her belly and that "would be one of the first things to go." She tends to think about the loose skin often because she had been overweight her "entire life and been bigger before," so now she has lost weight and is now dealing with excess weight at this point." P12 thought that she usually felt normal until going out: "You generally feel normal until you go other places. So, you don't really think about it until it's time to try on clothes or, oh, it's, you know, looking at the menu and you're trying to make certain options." She continued, "Just in general you sit somewhere and you're like, oh, this is kind of tight. You don't realize you don't think about it until your society kind of makes you think about it once you go out into the world, you know?"

# IQ2: How Reading Nutrition Labels Supported Weight Loss Goals

The second interview question involved nutrition labels and how they might support one's weight loss goals. Every participant except P7 had opinions on and experience with labels and the subject of nutrition. P1 said she reads nutrition labels "for things like added sugars." She reads them "on multiple occasions" because she tries to eat "low carb." She prefers to make a choice about "when [she wants] to have sugar." P1 also tries "to stay away from excessive salt like just added sodium in prepared foods as much as [she] can." She added that even though she "always had very good blood pressure,"

she realizes that in her family, "the older you get, blood pressure comes about as an issue," and she wants that "not to be an issue" for her.

P2 felt "blessed enough to be able to go to Whole Foods, or Trader Joe's or, you know, and buy more expensive products or identify products that are healthier" for her. She mentioned "a bowl, they call it a stir fry" that she tried to buy at Trader Joes that had good sized portions of vegetables and other nutritional food. P3 was aware of nutrition labels but stated, "Well, nutrition labels, very rarely do I use or read nutrition labels because it's something that you have to like get into the habit of doing where you would constantly read them." She claimed she was "not very good about reading labels" even though she was aware of them. Pressed further, she admitted she knew of others who read them: "Sometimes like people who are health conscious or people really being skinny, like I'm counting carbs, calories, so, yeah."

P4 is aware of the calories in different foods. Most fast food is "500 calories" but she said, "I know like egg, egg is 70 calories, banana, all these fruits I'm familiar with the calories and all that." She said she has used nutrition "especially when [she] first started losing the weight." She felt that nutrition labels "was very, very, very handy" for her because "especially when you go to McDonald's," she felt it "stopped" her particularly because even a kids' meal was 500 calories. P5 claimed she is aware of labeling when she eats out and also when "purchasing groceries," doing it "just across the board." She felt they were "useful" and made her "more cognizant when ordering out of what [she chooses] to order seeing the calorie content." If she looks at the calories and feels they're "a little higher than" she would "like it to be," she is "more inclined to not get it."

P6 is more aware of nutrition labels at the grocery store than at restaurants: "When I do my everyday shopping, I'm conscious of the labels or what I bought, because I'm having the issue now with high blood pressure." She claimed she has to "be aware and to buy things that's low in sodium." Still, she confessed to ignoring the calories when she ate out, though that was not often. P7 had nothing to say about nutrition labels. P8 said, "I am very good about checking to see what does one serving have. But my biggest, my biggest one is to look for the amount of sodium in food." She added, "The one time I was much more concerned about the sugar amounts, but I think what I really get involved with is the sodium quantity." She asked rhetorically, "And what is a serving of this particular thing that I plan to have? Or looking to have? And the sugars, how much sugar is there?" She emphasized that she did not "want to become diabetic."

P9's answer involved both the labels and government control. She thought it was important to have "accurate labeling on food contents" where the regulations from the federal government so that the manufacturers choose, the "government control mandates would be helpful" to avoid being misled as a consumer. P10 said she was aware of labeling "sometimes when eating out" if that was available. If they had it, "they say how many calories are in it, I would pay attention to that." She added, "And then that may affect how much I'm going to eat for the rest of the day or when I'm tracking how many calories I burned on my Apple watch. I kind of would balance it out that way." P11 pays attention labeling both when eating out and when at home. She said she would "definitely take into consideration or even so those particular with what [she chooses] to eat" when she goes out and if she could "substitute certain things." Continuing about eating out, P11

stated, "I was saying if they display the information on there, I do take the time to read it.

And if I'm able, I will switch things out depending on the calories, the calories content of the dish." She added that she believed "most restaurants now are doing that."

P12's answer was lengthy. She noted, "These labels are becoming a little more complicated as people are realizing just how bad a lot of things are for you or how you have to regulate them." She mentioned that it was important to watch for gluten "because that causes people to bloat, seem to have too many reactions. So how do you cut down on gluten, and how do you put in more whole wheat?" She added, "So, you know, just reading the label, you have to start with just looking at all the numbers, and then now you also have to go into all the ingredients too and seeing what are the additives." P12 emphasized, "Labels are more important than ever before because now there's a lot of things you have to consider, you know, so you have to consider sodium, you have to consider sugar, and you have to consider artificial ingredients." She went on about having to consider fat, "not just fat in general, the types of fats. So you know, your saturated fat, unsaturated fats or trans-fat." She cautioned, "You have to be very diligent and understanding about everything because now these labels are becoming a little more complicated as people are realizing just how bad a lot of things are for you" and that they have to be regulated. She talked on about how gluten can cause people to bloat and have too many reactions as well as monitoring additives, which is "very time consuming" and how "you have to start making a whole mental checklist." She concluded by discussing her time in Weight Watchers and their point system and how one has to make "a shift

towards trying to do the healthier stuff, more often and the not so healthy less often, because they're going to cost more, so that's the way to think about it."

#### IQ3: How Elected Politicians or the Government Can Help With Weight Loss

The third interview question was targeted at what politicians, or the government could do to prevent obesity. P1 felt that issues was "a huge problem, like overall access to food and cost of food." She mentioned that "even during this pandemic" the cost of food is rising really high, and "the cheapest foods are also food that are over processed." She went into great deal about how her partner, and she were aware of the "decisions about what type of food to eat." Most of the food is organic like "cage free eggs." She revealed how particular they are about "certain things" but when they were eating outside their home for "a period there for like maybe a month" they had "no idea what [they were' putting into [their] bodies." She felt that "no one's really watching closely into what's going on, like what's going into American body." She added that in Europe there was "a lot more control over how you can farm." She stated, "When I traveled to Europe, the food tasted better. There was a lot more control over how you can farm" and that they have "safeguards on things in place about how things can be planted in what can go into the food supply." She emphasized, "[Those in power are] not really monitoring for, or either we're not monitoring, or we allow, and I think it takes its toll," so people were not really aware of what goes on in corporate organic farming. People on "food stamps" she believed do not have "enough money for food. There's not enough money for people to live," which leads to them buying "cheaper things that aren't whole foods." P1 concluded, "That's really difficult and I think that's something the government can do something about, but it's not something that people can do."

P2 noted that of "those of us who don't necessarily have the funds" if the government would "help to provide easier ways to get food without having to pay so much, it would definitely help." She continued, "I'm working nights and if the number system thing like eating healthy were included in certain aspects or make it more available to you." P2 gave an example: "I would love for it to get included on my health insurance. I got to pay for health insurance every single month." P3 offered no opinion on the government regulation specifically but in reaction to the question talked about the popularity of certain diets and the authority of doctors: "Well, funny enough, it was just said, not on the issue of the elected politicians. I was just reading or researching like you know, diets." Then she discussed the latest fad, "intermittent fasting." Her reaction to a video she saw the previous night and the study that was conducted on it was "what your doctor tells you to do to lose weight and what they themselves do to lose weight it's the total opposite."

P4, in response to the question about elected politicians and policy stated, "I'm not sure. I don't know. I think losing weight is a personal thing, not like a politics political thing, but to me it's personal." She continued, "I never think about it in a political, like farm outlook, I guess if they have mostly gyms or gyms or give food stamps. I think it's probably give some kind of money monetary to people that are taking on stuff," which she thought "would work," and then she mentioned a friend telling her if "you're on

Medicare or something like that, you can attend the YMCA at a reduced rate. I don't know how that goes into play. I'm not sure."

P5 suggested, "I would say maybe create like price, a universal price scale for certain things like a gallon of milk, shouldn't be 10 cents more around the corner. And vegetables, the price shouldn't vary." She added, "I'm not sure. I don't know. I think losing weight is a personal thing." P5 complained about high prices for good food: "They could reduce the cost of healthier groceries because in general, I find that things that are better for me, they tend to cost more money." P6 was not sure of what could be done: "I don't see how they help me. Maybe I'm not conscious of it." When pressed, she said, "Well, I think it will be more done on having more resources for us, especially black women. Like some type of club that we can join where we could talk about other people's family, how they are dealing with it." She added, "They are popping up, but it's not as, there's not that many, like you would see what you call those bars, the like smoothie bars. Yeah. But it's not that many in that neighborhood."

P7 was somewhat cynical about government efforts: "I don't know that the government has a real intention behind America being healthy are. But if they did take an interest, I think the biggest place that they could start would be in schools." She mentioned, "The vending machines that they put in for children, the lunches that they offer for children, the options." P7 continued, "I also believe that for those that are dependent on the government for supplemental food, you know, whether it's SNAP or any other program, that there should be some education around the type of foods that you buy" to steer the "recipients toward healthier choices."

P8 suggested those responsible for labeling could be more helpful: "Well, certainly when they did put on it, how many calories are in the bag as, as opposed to what, when they put in what is in a serving" and more about salt. She added, "I think that we could do better ensuring that that's more commonly done and make the print larger for the nutrition of the foods in the packaging." Speaking about nutritional standards in New York City, P8 mentioned the new mayor elect: "The gentleman that's running for mayor, Eric Adams, he gets enough opportunity for a platform. He talks about things that would reduce diabetes from his own personal experience." P8 continued, "He talks about that quite a bit in speeches you really didn't think you would get ... they don't pay that much attention to a certain group of legislators to what it is. The public has to get it." She suggested, "I think they need to put some bills together and pass them, about what goes into food and how let people know that it's in the food."

P9 advocated for accuracy and more attention to mandates: "But I think in that regard, having accurate labeling on food contents where the regulations from the federal government so that the manufacturers choose, the government control mandates would be helpful. Otherwise, it can be misleading." P10 said, "Well, maybe not allowing certain, I mean, not for me personally, but not allowing certain foods in general, because there's so much poison in the food that we're eating." She continued, "That's why so many people are obese now. Okay. it would be nice to just restrict some of the less healthy foods.

These bad ingredients."

P11 implied the government could be involved with more healthful food: "I think they can help by making produce more affordable and making or producing better

produce, especially in a supermarket from the you know, low poverty neighborhoods." She said, "I feel like they could contribute to the food quality of the country. The produce where I live are absolutely horrible and we have to go far to get decent vegetables and herbs." She added, "Even if they're affordable, because sometimes produce is highly overpriced." Finally, P12 compared regulations in the United States to Europe: "We're not as regulated if you go to Europe, but other than Europe in the EU, they regulate a lot more stuff in terms of the additives." She also implied the government was beholden to corporations: "We let the companies run things here. So, they allow too much where these things are not even necessarily to put into your food, you know, coloring things just to make them look nice."

# **RQ2:** How African American Women Use Physical Activity to Lose Weight

The second research question was based on how overweight and obese African Americans women employ physical activity toward their weight loss goals. Only one interview question fell under RQ2, which asked them to discuss their physical strategies to lose weight.

#### IQ4: How Physical Activity Affects Weight Loss

Interview Q4 involved the various ways the participants engaged in physical activity. P1 "took a walk every day and ate healthful meals." She reported that was the main contributor to her weight loss. She added, "I hate the gym." P1 expounded on walking: "But I love to walk. I love walking and you know, sometimes I wish we lived closer to a park where you can walk just openly, just being greenery instead of walking down somebody's block, you know?" She added, "But I do love walking as an activity

and I'm recently trying to move more just in the house, like doing chores and different things that have me stretching and doing and taking on little projects." She concluded that the pandemic can be a distraction: "Because you know, when you're in a house, especially during this pandemic, you can easily find yourself clicking on the computer or watching TV."

P2 felt differently about gym workouts and would have "loved for it to get included on [her] health insurance." She argued that after having to pay for insurance "every single month, it would be nice if a gym membership" would be part of it so wouldn't have to pay out of pocket. She mentioned "recreational activities for those people who live near a park" adding, "I luckily, I do like to take advantage of it as much as I can. I think it's also what you put out there and sort out what's available." P3 said, "Well, first of all, I guess you would have to be consistent and motivated. So if you lack motivation and forget about it, it is not going to happen." She talked about having a "buddy system or an accountability partner so that you could like reach your goal or at least get them helping to reach your goal and maintaining your goal." However, when asked if she engaged in physical activity, she said, "No, I don't. That's all I know. I don't have enough motivation, self-motivation. It's not going to work." She also said, if she "had to make a choice if [she] ever went to the personal trainer or not go to school." She did recommend that "for starters in [their] neighborhood, they could make the parks more friendly."

P4 talked about how she "used to work out on a treadmill in the morning. And then the evening [she] used to do lift weights like 15 to 20 minutes in the evening." She

said, "I was really into it. I used to do skipping with a jump rope." She also did aerobics. Physical activity has helped her "because some people think of compliment you and say you look so good." Her husband encouraged her and walked with her sometimes. Her family encourages her as well. Her brother is "into hiking." And when another brother visited her from Florida, she took him to the park and walked a lot and felt encouraged by her family. P5 does "a cardio combat class three times a week" and also walks around her neighborhood. She explained, "It's a combination of like boxing, but we also do cardio mixed into it. I try to, at least I make it normally at least two times a week, but the goal is three times a week." She mentioned that since 2017 she even worked out through one of her pregnancies up till almost full term. She also has "a group of girlfriends who all work out together" and hold each other accountable if one "doesn't show up," which helps her.

P6 apparently works with children and during recess, they "have a relay lap around the park." She added, "So I will walk, do a brisk walk around there, around, I probably do like two or three laps." However, she stopped after COVID. In response to the importance of physical activity, P6 exclaimed, "Oh, definitely! Cause I know when I'm at work, we have no elevator, so the stairs is my workout." She continued, "So during my lunch period, I would walk up and down the stairs. Since COVID hit, we really didn't go into the buildings [except] like once a week. So I saw the weight gain from that. Because of that."

Working together with other women, P7 reported, "I'm set up for Zoom, and we did Zoom twice. So we started out twice a week. And then there were some women who prefer the walk and some women who preferred the Zoom, the workout." After that, they

started to "walk every morning." She explained, "Whoever wanted to walk would chime in, and then in the evening, three nights a week, we would do the workout. And that became like, it became my savior and I absolutely loved it." P7 found the group very encouraging though people were at different levels. For example, she said, "There was one woman who she was doing her workout from a chair because she got really tired very quickly. And the activity was a bit, it was a lot for her." P7 explained, "So the instructor just encouraged her to do as much as she can do it from your chair or do it sitting down; another person was having issues with her leg" so she was encouraged to just move she arms. And so everybody just worked at their own pace and I just thought it was wonderful because it was a way for us all to get moving, but you move at your own pace."

On physical activity, P8 stated, "You're going to have a better outcome if you want to reduce your weight. People, I think they think you got to get up and exercise like mad people the way I used to when I was younger." Now, it is "just start putting one foot in front of the other and walking that you know, to enjoy it and probably walk more or, you know, a decent amount of time." P8 admitted with her busy schedule, "you can't do so much all the time, but just moving it into your day, to just drive right up to everything you don't want to park and walk." "So," she said, "it means move more." She added, "If you recognize that movement is really critical and build it into the day, that will certainly keep all the weight down because you'd be burning more calories." She concluded, "And when you're thinking about it you tend to eat less exercise more. At least that's been my experience."

P9 mentioned she hadn't been up to the gym. She thinks of exercise as "burn[ing] calories." She added, "And I know when I was very active and exercising on a regular basis, I was able to lose weight and maintain the weight loss." She continued, "However, at that age you know, where I used to participate in actual exercise classes as well, the dance classes, which was very physical." She confessed, "I haven't been up there and I just stick to just walking and I walk every day and I can do stairs every day." P9 added, "So that has slowed the weight-loss in a sense, because then I'm not bringing in as much calories as I used to when I exercise on a regular basis, I mean, three times a week."

P10 also finds walking is the "simplest easiest thing." She is working her way up, though: "I look to jump rope and now branching into some jogging, some running. I did my first little race this summer. Yeah, 5k. So it was, I walked most of it." She continued, "I started to do yoga, which I found really helpful. Doing the yoga actually makes me want to then do my, you know, my exercise." She also mentioned phone apps to "use for workouts because they are timed." She explained, "So I like when I know something, I know how it's going to end, like, okay, this is for 15 minutes, that's it. And then I'm done. I love to dance though. That's one physical activity that I do."

P11 was inconsistent: "I'm not moving around too much; I just generally get lazy." She added, "So I feel like for me, if I keep busy, I'm automatically more active and it kind of gives me motivation of moving around more versus the days when I'm just lounging around and not really doing much." P11 continued, "So I just try to keep myself busy to keep myself moving. I have had moments where I do like a lot of exercise and I have moments where I'm not so into exercising" like her recent "burst of energy for doing

cardio." She added, "I have been doing a dancing in the house now with all the restrictions that I've ordered this dancing pole to help me, you know, build core strength." She stated, "So that's what I've been doing. I've been doing at-home workouts and I have a stationary bike."

P12 claimed, "Everybody's running on the same treadmill or everybody losing the same weight and expecting the same results." Then she argued, "And that's just not the case. And it gets discouraging sometimes for people when you are going to see those results." P12 explained, "This is what you do if you want to lose, this is what you do. If you want to tone. Like, I think it needs to be more of a broader way of talking about putting exercise into your routine." She then broke diet and activity down: "Because you know, diet is like 80%. And they say like, exercise is like 20%. And we got 20% people. I feel like everybody's doing the same thing." P12 explained the importance of having goals and support from: "I kept goals in mind. They're like, I really want to want to run half marathon. So, you know, just having friends around who also trying to have active lifestyles has been helpful."

#### **RQ3:** The Determinants of Weight Loss Success

Under RQ3 were the remaining five interview questions. They involved the following topics: (a) how others helped with weight loss efforts, (b) any others the participants could think of who can or have helped them with their desire to lose weight, (c) specific examples of anything they thought had helped them in their efforts to lose weight, (d) examples of anything that might have interfered with their weight loss attempts, and (e) thoughts regarding which factors determine if they either lost or gained

weight. Due to the similarity of the five research questions, not all the participants answered all of them; some of the answers overlapped.

#### IQ5: How Others Can or Have Helped with Weight Loss Success

Two of the 12 participants answered the fifth interview question on how others have helped with weight loss. The answers were not only related to people but concepts like positive reinforcement or not enough. P1 named positive reinforcement from different quarters: "I have friends share recipes and other ways that are based on staying healthy." She then discussed the concept of having supportive friends and being a supportive friend: "One thing I'm not good about, and I'm just not, I just want to be a better friend to other people. Being a better wife would help me." She reiterated, "I hate the gym. I just can't, I can't stick with it. It's just pitiful. And that's one way I'm not supportive of others. But I love sort of the positive reinforcement, the sort of every day like encouragement." P10 was knowledgeable about biology and described "autophagy": "Thirty-six hours brings your body into ... ketosis. But 36 hours, it's a really good number for your body, getting a chance to eat away at fat and things that shouldn't be there." She also set herself goals based on events: "My best friend got married, so that was our first little goal. My father told me to focus on that. You see benefits like when I bumped into my ex and he was like, 'Oh, you look so good!"

#### *IO6:* What Else Has Helped With the Desire to Lose Weight?

Out of all the participants, two answered the sixth research question. P6 found her father's untimely death from a heart attack at age 50 and his suffering from gout helped her realize she did not want the same kind of lifestyle. She was especially aware of his

death recently because she had just turned 50 herself. She also described how weight loss can change a person's life: "I do like when, when I'm at a certain ways, I just like the way I feel, I feel so much better. I feel lighter." She added, "I could move around because I heard as you get older and gain more weight, you start getting arthritis. I don't want that, a lot of joint pain. And so I'd rather be at least 150 and lower."

P10 said simply, "My family helped me with my weight loss." Then she expanded on personal changes that helped increase the desire to lose weight: "I think seeing my face change and feeling better. Oh my goodness. Now I would just run up and downstairs for fun. Like, oh, I can run up the stairs without feeling so heavy." She also "realized that what felt like possible aging was not, it was just weight. And like being sedentary." She added, "So while I'm like, oh my gosh, I feel like this cause I'm getting older. It wasn't that it was because I was heavy. You know? So that's been a good feeling." She tells her friends who are moaning, groaning about old age, "Don't say that because you're near my age. It's not age. It's you need to get up and move your body around because that's what it is, you know?" To confirm that her family helps her, she added, "And I can see that 'cause my dad is still beating me around the park and I can't keep up with him. It's not age."

# IQ7: Examples of Anything That Has Helped in Weight Loss Efforts

Six of the 12 participants answered IQ7, and they gave good, specific examples. P2 was definite in her answer: "It would definitely being able to be outdoors, and that is definitely a factor which helps in my weight loss." P2 added, "A factor that helped really being motivated to be persistent." P3 got motivated by watching a series of videos and

"getting as much information as [she could] on intermittent fasting and see how [she] can go about it, to help [herself]." P3 touted the benefits of a personal trainer but not at a low cost: "I've had a personal trainer. That did, you know, that works for a bit; they try to motivate me, but a personal trainer is not cheap."

P4 talked about dedication and motivation: "I am dedicated because I am motivated to keep on exercising. I think that would help. You have to really be dedicated." She added, "Also I'm motivated to really know how to stop eating cause third, to look at your diet to see what you're eating." P5 touted meal planning and time management: "When I'm consistent with cooking, getting into the gym and kind of planning my meals out." P7 talked about changing her "cooking style." She said, "I try to look up a lot of Mediterranean recipes. Anything that I know I shouldn't have, I try not to buy and bring in the house." P11 takes an eclectic approach: "Maybe I could combine this method with that method, and I'll look online and there's people who've done it already and it's worked for them." She was not driven particularly to exercise: "It doesn't really give me much motivation to get up and exercise. I guess it depends on lifestyle and I'm not sure with the pandemic as well. I'm sure it's different." The next two interview questions were answered by more participants and in more detail, giving rich data for the present study.

#### IO8: Examples of Anything That Might Have Interfered With Weight Loss

Two thirds of the participants answered the question about negative factors that worked against weight loss. P1 bemoaned her distance to a park and blamed the American food supply: "... like what's going into the American body ... Europe has

more control." She added that she has *not* had "a lot of doctors" talk to her about "weight loss in terms of the health issues." P3 complained about lack of time: "My time is really much more limited because every day I'm going to have something to do cause I'm in school." She continued, "But I have to also balance school and work, but that's going to prove a big challenge." P3 named others' "approach" as a challenge. She advised: "Don't be so judgmental.... don't drill me because I'm going to shut down. Once I shut down that is it. I know me." P5 has a small child. Her problem was "having a toddler going from one home to the other and just being home." She explained, "And I already get up really early, so often to do stuff first thing in the morning." She added, "It can be hard sometimes. I want to go, but sometimes I'm just too tired to go."

Families can also be a negative issue. P8 said, "If they're in families that are very critical or let's say they're the only ones heavy in their family and they're dealing with that." She added, "And that by itself creates anxiety for the person. And if the person needs to, and they're anxious, they're just getting bigger, you know." P8 also talked about stress eating: "I eat when I'm upset and there's so many stressful things that have occurred recently that really have interfered with that" and then she discussed some general problems for people who want to lose weight: "Just essentially if there's a place that's safe for them to walk or do they engage with other people to deal with weight loss or are they embarrassed about having to think that they need to lose weight." P10's hair and that of other Black women could drag out the little time they had devoted to fitness: "If you have to make your hairstyle work for working out every day at least until you get to a certain point, you know, I know that's hard for us. I have natural hair, so it's rough."

P11 said, "Something that definitely contributes to my weight gain and loss is the time of day I eat. If I don't eat late and start my first meal, like in the afternoon, that's when I lose the most weight." She continued, "But I noticed that when I do eat late, I wake hungry the next day." P11 found it difficult when other people are eating what she was denying herself: "And they're eating something that you wish you could have, or it was just those little things that would help if people were just more mindful of what they do around someone who is truly trying to lose weight." She said that she also had acid reflux and it seems "there's just always something up." P12 mentioned sleep: "If I get enough sleep, how much sleep." She also talked about the cost of healthful food: "And it's way more expensive. You still do better when you eat it. And it tastes a little better, but you pay, you know, you can't afford that sometimes."

# IQ9: Thoughts Regarding Factors That Determine If Weight is Lost or Gained

For the last interview question, eight out of 12 gave fairly in-depth answers. P1 first mentioned race: "You need to pay attention to the issues that affect Black women as a whole, because we've been ignored for so long." She had been working for weight loss for "the wedding." She remembered, "It wasn't easy, but you know, it was noticeable, but it takes a level of discipline." P2 and P3 also integrated in their answers the race factor and others' biased expectations involved in weight loss. P2 stated, "... Minority women are often put under so many different pressures that are not necessarily visible pressures. Things that we are and expectations that we're held to, that you have to be better then, then our health takes a backseat." P3 mentioned that "sometimes, you know, as black women, we have other things going on." P5 had similar sentiments about expectations: "I

would say in terms of how black women, the biggest stuff might be black women tend to try to be superwoman." She added, "We don't have the financial means to, you know, meal plan, have someone cooking deliver for you? I think all of that plays a role ... I think that health and fitness is more reinforced [in Caucasians]."

P8 discussed controlled eating and exercise: "You lose weight, if you actually deliberate about making more, taking more steps walking a little more engaging in activities that move your body and chose carefully what you eat. She recommended "concentrating on positive things, and then doing things that keep you, that you enjoy, you know move your hands for other things, then hand them to your mouth. So to speak." P9 had extensive information about personality, the portion sizes of other places, the abundance of food in the United States, and Black culture's view of obesity. First, she said, "Which factor, I think it's a person, your personality, it's up to each individual. And I think it's up to you to be vigilant and steadfast about being conscious of your weight gain and weight loss." Regarding portions, she stated, "Because everything here in America is huge. Okay. And when you travel elsewhere and especially in the UK, the sizes are very different and smaller than ours." On U.S. food availability, she complained there was "too much of all the good things that look good and taste good. The foods that we have, we are a land of plenty of food on every corner where you go." She added, "I think most of us as black women tend to be you know, it's hereditary or what can we say is cultural to be in the family." She said in Black culture it was "okay to be big because we are proud of who we are, no matter what size we are, we are not shamed."

P10 talked about the importance of information: "It's just knowing you need the information. I've been trying to help a lot of my friends now and I have to realize people just, they don't have the information." That is a problem, she said, "So they don't know how to lose, you know, how to lose the weight or why they can't lose it. So I think it's having the information also." P11 said, "I noticed that depending on the time of day I eat definitely determines my weight loss or gain, I lose weight from that [not eating] late." She added, "Another thing is how I can eat something really, really unhealthy and get on the scale. It'll be fine. And sometimes I eat something healthy. Wow, I get on the scale and it should be low, but it's not." She continued, "And then I'm realizing maybe I overindulged in like that smoothie, maybe I think that I thought was okay. It had a lot of calories and my body just couldn't metabolize that." She continued, "But if I'm not getting enough rest, drinking enough water, getting enough probiotic, which is now another thing that I've realized is so key to maintaining weight is probiotics, prebiotics. And sometimes I don't get enough of that."

Finally, P12 mentioned the importance of portion control: "So portion control is big because you know that sometimes determines what's on the scale for me and then the rest I used don't get enough." P12 explained what helped and hinderer her weight loss: "And then alcohol... cut that. I cut that out a while back mainly because like when I was running around and really busy, I was like, listen, I can't afford no hangovers right now, I'm busy." She said, "And I was like, this is just slowing me down. You have a one glass of wine. I'm waking up and I'm groggy. I get it. I don't, I'm busy. So I just had to cut it out." She talked about being abroad in York, where alcohol was around "everywhere"

until she got tired of it. Therefore, when she got back, she said, "It was kind of easy to slowly cut it out because I had so much of it. And then I noticed the difference. It helped my weight loss." She explained that "even a glass of wine like that's good for you sometimes, but then sometime it also can cause gain because you're going to have to metabolize it" something her body had to "deal with." She concluded, "Then lastly intermittent fasting helped me." She thought it worked sometimes, "but it's not something [she] would say is long term; it just helps in terms of maintenance to do it, to do fasting every so often."

#### **Themes**

After thoroughly analyzing the data, the following six themes arose, all of which were closely aligned with the research and interview questions: (a) perceptions including the subthemes of self-perceptions and others' perceptions; (b) nutritional knowledge; (c) public policies to help with weight loss; (d) physical activity to lose weight; (e) weight management support systems including the four subthemes of nutritional support, social support, emotional support, and virtual support, and (f) factors that interfere with or support weight loss (see Table 1).

# Theme 1: Perceptions

The first interview questions elicited detailed answers from the participants on their daily experiences of being overweight. The answers involved both self-perceptions and others' perceptions of which they were strongly aware.

**Self-perceptions.** One participant talked about how people look at her "strange sometimes." Another participant described her "hard struggle" to lose weight. A third

participant stated she "wanted to be smaller" and a fourth participant felt like she was forced to be "very conscious" of how she dressed every day. One woman was painfully aware of the physical things she used to do but could engage in no longer due to her present state of health. P6 though her experiences were more "mental" and noted people put on themselves too much responsibility of having to "do something." Still, she did not always feel comfortable with herself or others. Another participant had lost a lot of weight and therefore had loose skin that was another issue to deal with in being overweight and another recognized she experienced "emotional eating." P5 had difficulty engaging in "regular activities" and that they were "more strenuous than they used to be."

Others' Perceptions. P2 blamed "society" for making her hyperaware of her food and clothing choices and that she felt "normal until going out" when society made her self-conscious. P10 had embarrassing memories of her father saying overweight women had "moon faces," which led her to "not liking [her] face." Another participant talked about people putting "expectations on each other."

# Theme 2: Nutritional Knowledge

All participants except one had comments on nutritional labeling and knowledge to support weight loss. The first participant read labels regularly. Another felt grateful she could afford to go to stores like Trader Joe's or Whole Foods where she could get expensive but healthier products. Another participant is aware of the dangers of fast foods that are mostly "500 calories" whereas healthful foods have fewer calories. Due to P6's high blood pressure, she reads labels consistently. P4 is especially aware of them in places like McDonalds. She is aware of the calories in different foods.

Most fast food is "500 calories" but she said, "I know like egg, egg is 70 calories, banana, all these fruits I'm familiar with the calories and all that." Others are aware of labels when "purchasing groceries" or more aware of nutrition labels at the supermarket than at restaurants. P8 has to be aware of "high sodium" and P9 bemoaned government's overreach on nutritional control. P12 had a long answer that involved more complicated labeling and the importance of looking at everything: numbers, calories, ingredients, sodium, sugar, and non-natural ingredients. All in all, most of the participants had nutritional knowledge and used it in their desire to control weight gain and loss.

# Theme 3: Public Policies to Help With Weight Loss

Theme 4 followed the third interview question under the first research question. Participants were asked about what politicians or the government could do to prevent obesity. Most felt the government was a big factor in their control of food systems, in rising prices, in overprocessing of food, of the cost of buying healthful food. P2 for example noted that for people without sufficient funds, the government could "help to provide easier ways to get food without having to pay so much."

#### Theme 4: Physical Activity to Lose Weight

All 12 participants had solutions to or opinions on losing weight with physical activity. Many participants used walking as a main activity, especially if they "hated the gym." A participant who did like working out at the gym thought it should be "included on health insurance" because of the amount she has to pay every month. One participant who liked walking thought the parks should be "more friendly." Another participant combined walking with "cardio combat" she engages in three times a week. P6 combines

working with children and getting daily exercise, doing so outside. During COVID19, some participants did Zoom exercise classes and others just walked or did both. P9 thought walking was just "the easiest thing" but was working up to jogging, jumping rope, and trying a 5K for the first time. P11 confessed to "being lazy" but feels as long as she is "busy" she gets sufficient activity. Finally, P12 thought people who engaged in the same activity should not expect "the same results" because it varied.

# Theme 5: Weight Management Support Systems

Interview question 5 elicited detailed answers from the participants on the kinds of support they received as well as the last few interview questions, which were similar to each other. Their answers provided the most detailed data of all questions (the interview questions that followed simply elicited more rich details covered in the first five questions). The kinds of support the participants discussed involved nutritional, social, emotional, and virtual support, which comprised the four subthemes.

**Nutritional Support.** The first subtheme was mostly developed from the second interview question about labeling and government's hand in labels and food systems but also in the of nutritional details: "So, you know, just reading the label, you have to start with just looking at all the numbers, and then now you also have to go into all the ingredients too fifth. Almost all the participants were aware of nutrition, what to look for and what to avoid. For example, P8 self-reported as being "very good about checking" servings and her "biggest one is to look for the amount of sodium in food." P10 mostly was aware when eating out and "would pay attention" to calories if the restaurant labels

were available. P11 was especially aware and seeing "what are the additives." In IQ5, some participants talked about positive reinforcement. P10, for instance described her nutritional support that came from her knowledge of biology. Regarding autophagy she stated: "Thirty-six hours brings your body into … ketosis."

Social Support. Social support was mentioned frequently by participants who exercise with others and seek help from family and friends. P1 for example has "friends who share recipes" and seeks other support from friends are based on healthful lifestyles. P10 also gave social support to others because she realized "people just, they don't have the information ... so they don't know how to lose the weight or why they can't lose it." Social support could also be expressed in lack of support from "families that are very critical" of which P8 spoke in IQ8 that "by itself creates anxiety for the person" which just leads to "getting bigger."

Emotional Support. Several of the participants were hard on themselves in their struggle to lose weight and relied on others to bolster their efforts. P2, for example, claimed her family gave her much support. Her brother-in-law, an excellent cook makes sure P2 gets special dishes like "rice or pasta or ... a salad to go with it" and "a different type of side" because he realizes she is trying to lose weight. P7 got emotional support from her doctor who "really gave me some good tips on snacking" and is "very encouraging." P7, as seen in the next subtheme found a local group of women who emotionally supported each other.

**Virtual Support.** Some participants took advantage of virtual classes, recorded classes, zoom classes, and other multi-media means to support them if they were mostly

based at home, especially due to COVID19. P7, for instance was "set up for Zoom." She worked with people she knew virtually and found "some women prefer the walk and some women preferred the Zoom," so the virtual (and group) support led to the group members doing both exercising in their homes and walking outside every morning.

# Theme 6: Factors That Interfere With or Support Weight Loss

In line with the third research question, the interview questions covered what supported or did not support weight loss. Fewer participants answered the last three questions, but the answers were in-depth and specific. Some of the factors that helped weight loss, answered by six of 12 participants were being outdoors, getting motivated by watching videos, having a personal trainer though expensive, possessing dedication and motivation, planning meals and managing time, changing "cooking style," combining various strategies, and engaging in regular exercise. Eight of 10 participants had ideas about what interfered with weight loss: lack of nutritional policies by the U.S. government, doctors who did not discuss weight loss with them, lack of time and having to balance activities, exhaustion, others' judgment, critical families that create anxiety, stress eating, responsibilities for having small children, need for "a place" to seek others' support in similar weight loss situations, having hair issues as Black women that interfere with time to work out, denying oneself food when out in public while peers do not have to worry, and the cost of healthful food.

Other factors came in (regarding if weight is lost or gained) that had to deal with racial issues. P1 said, "You need to pay attention to the issues that affect Black women as a whole, because we've been ignored for so long," for example. P1 discussed the

experiences she had with medical professionals: "You know, people come with doctors in particular, come with preconceived notions of who I am as a black woman. And I'm just as different from another black woman as I am from a white woman." She continued, "Like we are not a monolith. We are just as different. And while you not only do you need to pay attention to the issues that affect black women as a whole, because we've been ignored for so long." Some people used an event like a wedding as a goal. P5 reported that was the main contributor to her weight loss: "And so I needed to drop at least 10 to 15 pounds before the wedding. And you know, I'm not a crash dieter. That never works for me. It makes me sick." She continued, "And basically I just took to walking every day and eating healthful meals and I dropped the weight like that. I mean, it wasn't easy, but it was noticeable. It takes a level of discipline I don't always have."

Others mentioned the stress of being a Black woman in society that led to various health issues, which put a lot more on their plates than had other groups. Also, P5 noted that Black women are expected to be "super women" and that health and fitness is more reinforced in White women. P5 stated, "I would say in terms of how black women, the biggest stuff might be black women tend to try to be superwoman. We don't have the financial means to, you know have someone cooking deliver for you?" P8 discussed controlled exercise and eating and taking little steps and remaining positive. P9 had extensive information about personality, the portion sizes of other places, the abundance of food in the United States, and Black culture's view of obesity in addition to the huge portions in the United States compared to those in other countries, the former of which reinforces weight gain. She noted, "I think most of us as black women tend to say that

you know, it's hereditary or is cultural to be in the family." She added, "And, you know, it's okay to be big because we are proud of who we are, no matter what size we are, we are not shamed." There is also too much food outside the home that is tempting. Lack of information can hinder weight loss according to P10. P11 thought the time of day of eating controlled weight loss to a degree. Finally, P12 emphasized portion control. Even though not everyone answered the questions connected to RQ3, those answers given provided thick, rich data from which six themes naturally arose.

# **Summary**

In this chapter, I presented the results of the collected data and summarized the data analysis. A thorough review of the data was connected to each research question and the supporting interview questions. In Chapter 5, I present an interpretation of the data. The existing literature on overweight and obesity and weight loss experiences of overweight and obese African American women are examined through the lens of the study's theoretical framework. Limitations of the study are discussed, followed by recommendations for future research. Chapter 5 concludes with positive social implications associated with overweight and obesity in African American women.

#### Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative phenomenological study was to explore the lived experiences of overweight and obese African American women in New York City and the influence of health policy (specifically the Nutrition Labeling Law), physical activity, and a healthy diet among members of this population group. I sought to explore the influence of the nutrition policy on the lived experiences of these women in to identify strategies that may inform public policy to better address their needs to lead the way in measures requiring restaurants to include caloric information on their menus and by having city health inspectors issue violation notices to area restaurants that do not comply with this regulation.

I conducted in-depth interviews of 12 African American female participants regarding their experience of being overweight and obese. The key findings of this study comprised six themes that arose from a thorough analysis of the interview transcripts, which were as follows: (a) perceptions including the subthemes of self-perceptions and others' perceptions; (b) nutritional knowledge; (c) public policies to help with weight loss; (d) physical activity to lose weight; (e) weight management support systems including the four subthemes of nutritional support, social support, emotional support, and virtual support; and (f) factors that interfere with or support weight loss. The six themes were closely aligned with the research questions; therefore, the interpretations of the data are categorized by research questions. Following the interpretations of the data are the limitations of the study, recommendations for public policies and further research, implications for positive social change and professional practice, and a conclusion.

#### **Interpretation of Findings**

The in-depth interviews of 12 African American women who experienced overweight or obesity resulted in six themes. I organized this section by research questions under which the six themes and subthemes align. Each interpretation contains literature that demonstrates whether the findings confirm, disconfirm, or extend knowledge in the discipline. The interpretation section provides in-depth analysis of the similarities and differences between the study findings and the current literature. The theoretical framework for this study the SEMFPAD, which encompasses the governmental sector in both home and work sites, where policy may influence decisions and choices. This framework incorporates individual factors such as age, sex, socioeconomic status, race/ethnicity, and disability, as well as personal factors including psychology, knowledge and skills, genes, environment, and food preferences (Jung et al., 2017).

I focused on aspects of the theoretical framework related to policy legislation to gather insight into the role that reading nutrition labels plays in the lived experiences of overweight and obese African American women. The SEMFPAD also calls for examining environmental factors other than nutrition to address obesity and overweight in African American women. In this study, I focused on aspects of the model related to policy legislation to gather insight into the role that policy and reading nutrition labels play in the participants' experiences of being overweight and obese. The following themes aligned well with this theoretical framework.

The themes (perceptions, nutritional knowledge, public policies to help with weight loss, physical activity to lose weight, weight management support systems and factors that interfere with or support weight loss) that emerged from this study represented the voices and experiences of 12 overweight and obese African American women in New York City. These themes are aligned with the theoretical framework for this study, the SEMFPAD based on the paucity of research on what factors contribute to weight loss for a population (overweight and obese African American women) who are disproportionately impacted with the highest incidence of overweight and obesity.

African American women have the highest incidence of overweight or obesity (4 out of 5) compared to any other group in America. Data from 2018 show that African American women were 50% more likely to be obese as compared to non-Hispanic whites (OMH, U.S. Department of Health & Human Services).

# **RQ1:** How the Nutritional Labeling Law Influences Everyday Lives

Under RQ1, the participants were asked three interview questions concerning how being overweight or obese affected their everyday lives, whether they read nutrition labels, and their perceptions concerning public policy. The first three themes aligned with the first research question. RQ1 involved their everyday experiences of being overweight, their nutritional knowledge, and public policies.

#### Theme 1: Perceptions

In the first interview question, the stories all 12 participants shared about their everyday experiences of being overweight involved both self-perceptions and the perceptions of others, of which they were strongly aware. Answers that indicated the first

subtheme included getting "strange" looks, the "hard struggle" to lose weight, wanting "to be smaller," the inability to engage in physical activities they used to do, "emotional eating," issues with "loose skin," and the mental strain overweight people put on themselves to "do something." As for others' perceptions, participants looked to "society" for forcing overweight people to be "hyperaware of food choices and clothing choices," which make them self-conscious. One participant had bad memories of her father calling people's countenances "moon faces."

All in all, the participants had demonstrated strong awareness of being overweight in American society. Puhl et al.'s (2020) research highlighted the experiences of the study's participants in identifying that weight stigma is a key aspect of the lived experience of individuals with obesity. Like the participants of the present study, Puhl et al. found that more attention should be given to weight stigma to reduce the negative impact on health behaviors. In their own words, the participants in this study discussed their everyday experience of shame associated with how others look at them, and subsequently their own sensitivities of how they are viewed when out in public.

For overweight and obese individuals, weight bias and obesity stigma cuts across socioeconomic and racial groups. The CDC and WHO in Europe are focusing on the direction of individual behaviors and perceived failures while neglecting to take into consideration the very essence of a socioecological approach of not only personal, but also policy, environmental, cultural, social, and biological aspects. The voices of the 12 participants have the potential to extend knowledge, as they shared their everyday

experiences of shame and self-consciousness related to the perception of forcing overweight people to be hypersensitive about their food and clothing choices.

This study's theme of perceptions (including self-perception and how others perceive overweight and obese individuals), is further highlighted by Myre et al. (2021) who reported that weight stigma is prevalent in the everyday lives of overweight and obese individuals, including in the area of physical activity (one of the constructs of the SEMFPAD). Similar to the present study, Myre et al. conducted a qualitative inquiry, using semi structured telephone interviews with 16 women (aged 20-59). Their findings that the women's experiences of physical-activity-related weight stigma included stigmatizing comments and treatment, and lack of appropriate and affordable clothing options that resulted in feelings of shame, sadness, guilt, anger, and a heightened anticipation of stigma.

# Theme 2: Nutritional Knowledge

The second interview question concerned the participants' familiarity with nutrition, reading labels, their thoughts on availability of healthy food, and so on, which gave rise to the theme of nutritional knowledge. Eleven out of 12 participants commented on nutrition labels and how foods can support or sabotage weight loss. Some read labels regularly, another was happy her economic level allowed her to shop in good stores like Whole Foods, some noted their awareness of the dangers of fast food and high sodium, others were aware of the calories in certain foods like eggs and bananas. Some participants were more aware of nutrition labeling when going shopping than eating in

restaurants. Participants with health issues like high blood pressure or family medical history felt compelled to read labels.

In general, the participants had adequate awareness of nutrition to improve their lifestyle involving what they ate. Gustafson (2019) argued that a quarter century of mandatory labels for nutrition on processed U.S. food products have done little to affect overweight and obesity trends. Gustafson discussed a study on the Rosebud Reservation in South Dakota where there are high obesity rates for children through older adults in which tailored nutrition labels with both text and pictures increased the likelihood that residents would choose healthier foods as opposed to using generic labels. Thus, improved nutrition labeling might meet the needs of the participants who generally sought information on nutrition to be healthier.

# Theme 3: Public Policies to Help With Weight Loss

Theme 3 aligned with the third interview question on what the government can do to prevent obesity in American citizens. Eleven out of 12 participants offered strong opinions because several felt the government had a major role in how agriculture and food processing along with inflationary prices are controlled. One participant complained that government and politicians should do more to help people without sufficient incomes to provide "universal price scales" so basic foods, especially healthful foods, would not have significant price variations. Another participant expressed her disdain for the government's lack of interest in promoting health for its citizens. Another felt Europe had better regulations than had the United States.

Roberto (2020) argued that global obesity would be reversed only if the food supply environment underwent significant change, mostly through policy. Roberto named the following policies that might reverse trends: marketing nutritional foods, mandating consistent labeling on the front of packages, taxing junk foods and drinks, and changing the unhealthy food defaults to healthy ones. Such findings are consistent with my study in which most participants expressed that the government should play a larger role both in pricing and processing of food.

The public policy adopted for this study is the Nutrition Labeling & Education Act (NLEA) signed into law on November 8, 1990 by President George H.W. Bush (GovTrack, n.d.), with specific focus on knowledge related to reading of nutrition labels. The data analysis of this study showed the participants are aware of nutrition labels and many of them read labels when eating out, and some read labels when making decisions regarding what to buy in grocery stores. I found these participants have an awareness of reading nutrition labels. Many of them read nutrition labels when making food choices, but their experience of weight loss over the past year has not been effective, which is in keeping with the literature. Even though nutrition labeling has been in effect for decades, first signed into law by President George Bush in 1990, obesity and other chronic diseases continue to rise (Jung et al., 2017).

Mozaffarian et al. (2018) supported the tenets of this study's ecological framework, in offering that there are multiple, complex factors beyond personal decisions that strongly influence dietary choices and patterns. These authors support the study findings of the voices of the participants in this study, that adherence to dietary

guidelines, clinical counseling, and reading food and menu labels are not enough to stem the direction and trajectory of obesity in this country. Mozaffarian went a step further to say that point of purchase labeling are "soft policies" that place most responsibility on the individual because industry is more comfortable with limited effectiveness on behavior change, and even smaller effects on marginalized groups. However, integration of the different levels in an ecological framework such as the SEMFPAD can be valuable because there is merging across the levels of individual, sociocultural, food and built environments, and the policy environment.

# **RQ2:** How African American Women Use Physical Activity to Lose Weight

RQ2 elicited the fourth theme, to which all 12 participants responded. The theme aligned with the research question, for all participants shared their experiences on the topic.

# Theme 4: Physical Activity to Lose Weight

All the participants offered their opinions about physical activity as well as their personal solutions. Although some participants used a gym, most of them walked as their major activity. One participant though walking was just "the easiest thing" to do yet was working up to jogging and an eventual 5K, yet another participant complained about unfriendly parks. Safer, more accessible parks would make walking easier. Some participants "hated the gym," so they felt walking was a simple solution. During the COVID19 pandemic, some participants turned to live Zoom classes or other virtual workouts. A participant who works with children gets her walking workout during recess.

P12 offered her opinion that results vary using the same exercise routine among different people, so they should not expect "the same results."

The findings demonstrated that physical activity in one form or another was used by all 12 participants. Among other factors in physical activity is the stigma of exercising in public. Martin (2018) reported that Black women, of all ethnic groups, engaged in the optimal amount of physical activity the least. Pickett and Cunningham (2018) claimed that having larger bodies in the society that touts thinness, muscles, and physical activity may be an obstacle to participating in public activity spaces and often deters people from participating in physical exercise. Most of the participants did not exercise in public, usually simply walking, exercising in the course of the workday, or using virtual classes.

The theme of physical activity to support weight loss is directly anchored to this study's research question and theoretical framework, the SEMFPAD. All the participants discussed walking as being one form of exercise in which they participated. However, none of the participants met the basic recommendations for physical as recommended by the Physical Activity Guidelines from the U.S. Department of Health and Human Services (2018) for adults, suggesting that adults should move more and sit less throughout the day.

For substantial health benefits, adults should engage in some form of physical activity at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity physical activity. According to the Physical Activity Guidelines, additional health benefits can be achieved by engaging in physical

activity beyond 300 minutes (5 hours) of moderate intensity physical activity a week (U.S. Department of Health and Human Services, 2018).

#### **RQ3:** Determinants of Weight Loss in African American Women

Not all participants answered the five interview questions aligned to the third research question. However, the answers given were in-depth reflections that gave rise to two themes. Theme 5 had four subthemes that arose from the first four and Theme 6 elicited extensive data from the final interview question.

# Theme 5: Weight Management Support Systems

In the second interview question under RQ1 on nutrition labels and in the four interview questions concerning (a) how others can or have helped with weight loss answered by 2 of 12, (b) other factors that helped in the desire to lose weight also answered by 2 of 12, (c) examples of anything that helped weight loss answered by 6 of 12, and (d) examples of anything that hindered weight loss answered by 8 of 12, four subthemes related to support arose: nutritional, social, emotional, and virtual support. The first, nutritional support, arose came from the first research question regarding labels and public policies regarding food systems. The others arose from the interview questions under RQ3. Social support mostly came from family, friends, and exercise companions. Emotional support was significant due to the mental strain participants often went through when they were hard on themselves due to social pressures, so they had to rely on others to support their efforts to get healthier. Finally, many of the participants found virtual support in the great array of multimedia classes, recorded classes, and live Zoom classes, especially for those who mostly lived in their homes during the pandemic.

Although virtual exercise classes have been available for decades (e.g., Jack LaLanne's fitness show in the mid-20th century), reliance on virtual exercise has increased during the pandemic when gyms and other venues were closed to the public.

Jessen-Winge et al. (2021) reported that, globally, almost 2 billion adults are overweight or obese. However, in Denmark, the setting of the study, it is the municipality that is responsible for supporting such people with programming. Jessen-Winge et al. posited the first step in developing programming is to seek the perspectives of the people being served. What people feel important was support in the structure of each day, considering activities to replace what adds to emotional and cognitive burdens, help people raise their self-efficacy, and gather family members in addition to peers and health professionals to support the weight loss process. Although exercise and diet are important, the participants (N = 34) felt these should be in balance with everyday meaningful activities (Jessen-Winge et al, 2021).

Similarly, in a quantitative study in Japan, Iwabu et al. (2021) found that patients with obesity (rising in Japan) and their healthcare providers needed to be aware of the clinical management and pathophysiological basis for weight loss. Culturally, Japanese people tend to take on too much personal responsibility for weight management and do not seek medical support consistently. However, those who do have mostly positive emotions after communicating with the health professionals, which Iwabu et al. recommended should prior to complications related to overweight start the communication process.

#### Theme 6: Factors That Interfere With or Support Weight Loss

Throughout the interview questions under RQ3, much data arose connected to factors that support or interfere with weight loss, particularly IQs 7 and 8. Also 8 of the 12 participants gave rich answers to the final interview question regarding their thoughts on factors that determine if weight is lost or gained. Throughout the final part of the interviews, detailed experiences were shared. As mentioned, few participants answered IQs 5 and 6 and half through two-thirds of the participants answered IQs 7 through 9, yet the results revealed a thorough exploration of the topic regarding determinants of weight loss in overweight or obese African American women. Answers covered motivation, inspiration, racism, personal efforts to change aspects of lifestyles that were sabotaging their efforts, combining different strategies, regular exercise, lack of nutritional policies by the government, feeling judged, having the responsibilities of work or small children, denying oneself in the midst of others enjoying eating in public, needing support from others in similar situations, critical families, lack of time, and balancing life activities.

Hansen et al. (2018) found the best support for weight loss is an environment in which friends and family do not discourage healthful eating as well as applying a strategy involving particular behavioral change techniques to highlight its benefits. In alignment with the theoretical framework, the SEMFPAD, Hansen et al. recommended weight loss programs can address a person who is trying to lose weight's social environment. In such an environment, friends and family can be of significant support to the person trying to lose weight.

Race was a factor for some. One participant noted that being a Black woman is stressful and can lead to health issues, especially when cultural lifestyles or racism can interfere, including expectations that they are expected to be "super women" or their culture has different views of obesity than White culture. Even the daily pressure to deal with being Black caused stress for one participant.

Aside from race, there was the mainstream American culture that included large portion sizes and the abundance of food, but often not healthful food. Similar to the present study was Kennedy et al.'s (2021) discussion on healthy eating, effective program leadership, and in the case of families, parental involvement having not only the easiest but the most significant impact on weight loss. Kumanyika (2019) reported that obesity is especially high in low income ethnic minority groups who are socially marginalized in U.S. society. The present system and public policies may target the economic, information, physical, and social environment but do not address inequality in the environmental context, which may in itself maintain disparities. Kumanyika also stated that those who are socially disadvantaged are more likely to dwell in poor housing and have fewer services and fewer food choices in their neighborhoods.

#### **Limitations of the Study**

A major limitation of this qualitative phenomenological study is generalizability to other studies or groups due to relatively small sample size. Further, I was not equipped to address ethical or moral issues (Polit & Beck, 2021). In this study, I addressed the issues of weight loss, overweight, and obesity as complex entities. Similarly, I took a multidimensional analysis to the experiences of participants. Because of the self-reports

in the study, participants may have presented themselves in the best light, a factor of which to be aware. Though I am employed professionally in health care and am aware of diseases of which obesity is a major health challenge, I had to use bracketing to control my own biases as described by Colaizzi (1978).

The semistructured interviews contained in-depth data but because they were recorded over the phone, I could not observe body language and facial expressions, which would have enhanced the study. Nevertheless, I was attentive to tone and voice and I used reflection for clarification and to engage with the participants. Even though I reached data saturation at eight participants, full interviews were held with all 12 participants; however, with the full involvement of all 12, I could not get a completely accurate perspective of how African American women in general are involved with living with overweight and obesity.

#### Recommendations

The two main constructs from the theoretical framework that impact weight loss were reading nutrition labels to improve healthy eating habits and engaging in physical activity. Thus, based on the elements of an ecological framework, policy, systems, built environment, and personal responsibility, the participants were actively engaged to some extent. Still, while all of them engaged in walking as a form of physical activity, they expressed feelings of numbness and shame based on their perception of how others viewed them. Their barriers were based on their view of how others perceived them, which in turn, affected their self-perceptions less positively.

As a national policy initiative, the nutritional labeling law has been enacted and enforced in New York City by the two previous mayors. Considering this initiative and the frequency in which African American families consume meals outside of the home, I offer the following recommendations, first for policy and then for future research. First, local elected officials and lawmakers can provide financial support to African American communities for education to improve awareness of the menu labeling law. Second, local elected officials and lawmakers can provide financial support for education to explain the terminology used in the menu labeling law (examples: helping consumers to understand that words such as "fructose" and "sucrose" may be used instead of the word "sugar," that the word "sodium" may be used instead of the word "salt," helping consumers to decipher what a serving size is).

Third, local elected officials and lawmakers can make changes to the menu labeling law to make the use of it more culturally appropriate based on reading comprehension (using visuals/pictures and increasing the size of the print may be a place to start). Fourth, local elected officials and lawmakers can work with companies to focus on health promotion and disease prevention by supporting health insurance plans to provide incentives by reducing premiums for individuals who lose and sustain weight loss, for a period to be determined. Fifth, local elected officials and lawmakers can partner with local communities and civic organizations to create health committees and other opportunities for overweight and obese individuals to be represented. Finally, budgets of elected politicians and lawmakers should include designated funds for

improvement in the built environment (safer streets, outdoor areas for walking and recreation).

Policymakers can take away information from this study so they can partner with others who experience overweight and obesity. The policymakers can pass legislation so these women can have a safe environment in which they can exercise to meet the minimal goals of the 2018 Physical Activities Guidelines. If lawmakers could engage in community planning, they can involve those who experience overweight and obesity (using the findings in this study) by increasing access to places and opportunities to improve healthful eating and productive exercise. They can continue to enforce and amend the New York City menu labeling guidelines and to enhance them by using more visual menus to support healthy eating.

Furthermore, financial support and incentives can be given to urban communities, which would allow policy makers to work with community business owners, especially neighborhood "mom and pop" stores to provide fresh and healthy food choices at prices that local people can afford. New York has been at the forefront of social change involving nutrition, starting with being one of the first states to enforce the menu labeling law. Valiant attempts by previous Mayor Bloomberg to tax large beverages, Mayor De Blasio's 2017 announcement of updated requirements for chain food retailers and restaurants to post calorie counts and full nutritional information, and the promise of Mayor Eric Adams to prevent disease and promote health have demonstrated committed leadership in New York City to confront overweight and obesity as a significant health problem that needs to be addressed. As such, policy makers can be leaders for other

communities across the country to encourage them to provide financial resources and incentives to expand education to support a cultural shift on a healthier quality of life for their citizens.

Regarding future research, Kumanyika (2019) claimed that one of the gaps in the literature is limited studies showing approaches to successful weight loss for obese and overweight African American women. First, future research should be done using community based cultural specific action research to provide solutions to the problem of overweight and obese urban adults. Next, additional research should be done on how to replicate the findings of the present study to provide tools to help urban communities to make a cultural shift toward more healthful nutrition and physical activity without making major changes to the culture (e.g., plant-based soul food, or healthier ways of preparing preferred foods). Finally, future research should focus on cross-generational experiences.

# **Implications for Social Change**

Implications for social change resulting from the findings of the study emanates from the lived experiences of overweight and obese African American women's weight loss journey and the role reading nutrition labels and engaging in physical activity has had on this phenomenon. These narratives add voice to our understanding of the impact of policy implementation and evaluation. The findings reinforce the importance of meeting people "where they are at," versus adopting the position that one size fits all. The findings also highlight the significance of hearing the voices of those most impacted by public policies as a part of the policy evaluation process. The study findings will be

shared with lawmakers; healthcare professionals; and civic, church and community groups.

Social change is a start. Given the high incidence of overweight and obesity among African American women, reports of low success rate of weight loss, health comorbidities, and economic costs, it is compelling to identify social positive changes that the findings of this study will add to the obesity narrative. Based on the framework of this study, the SEMFPAD, social positive change is viewed through a socioecological lens, aligned with the individual, the behavior, and the built, social, and policy environments.

According to the ecological framework, individual decision making and empowerment are essential to sustained behavior changes. Although the women in this study were knowledgeable and aware of the importance of reading nutrition labels for a healthy diet, knowledge and awareness by themselves are not impactful enough to consistently help them achieve their weight loss goals. Through the lens of this study's ecological framework, one needs to look further to educate and engage interested individuals to advocate for overweight and obese people. Based on the paucity of research studies involving African American women, research should be done to include this group of overweight and obese individuals in clinical trials. Regarding policy, built environment, and an organizational level, considering the negative impact of the COVID 19 pandemic on overweight and obese individuals, special consideration should be given to this population, identified by the CDC as high risk based on obesity as a preexisting condition.

#### Conclusions

Comorbidities, such as diabetes, hypertension, heart disease and stroke, associated with being overweight and obese have been well documented in the research literature as well as the adverse impact these health conditions have on quality and longevity of life for people of color. The importance of healthy weight in positive health outcomes resurfaced recently during the COVID 19 global pandemic when obesity was a major risk factor for severe illness and death from COVID related complications. While the importance of weight loss has been documented and interventions can combat the problem, these interventions have not been successful for African American women. Findings in this study indicate that taking personal responsibility for weight loss by African American women such as reading nutrition labels and engaging in physical activity are not adequate to support weight loss. These findings are aligned with socioecological models revealing that all aspects of the built environment are necessary for improved health outcomes, especially cultural considerations. While policies to require nutrition labeling are very important tools in assisting individuals make healthy food choices, the language used is important. Also important are self-perception and trust in the message and the messenger. Policy evaluation is an important part of the policymaking process and is needed to improve policy outcomes. The voices of the overweight and obese African American women in this study can provide valuable insight to policymakers pivotal to changing the environmental, policy, and social pyramids for weight loss. Hearing the voices of those impacted by policies, particularly ethnic minority groups, should be standard practice.

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### Appendix A: Screening Questionnaire

## **Weight Loss Experiences of Black Women**

My name is Richardeanea Theodore, and I am a doctoral student in the School of Public Policy Administration at Walden University, a fully accredited online University, based in Minneapolis, Minnesota. I am completing my dissertation research on the experiences of Black women who live in New York City on reading nutrition labels and participating in physical activity in their efforts to lose weight. I am pleased that you are interested in participating in this research. Please complete the 10 minute questionnaire below and provide the best way that you would like to be contacted to schedule an appointment for a 1 hour interview.

Please choose the best answer to each question by checking the box on the left or by writing your answer in the blank space beside each question.

## **Screening Survey**

Which borough do you live in?

- Brooklyn
- Queens
- Bronx
- Manhattan
- Staten Island

O2

What is your sex?

. 0	Female
. 0	Male
Q3 What is yo	our age?
	between 20 to 31 years of age between 31 to 41 years of age between 41 to 51 years of age Between 51 to 61 years of age between 61-70 years of age Click to write Choice 6 Click to write Choice 7 Click to write Choice 8 Click to write Choice 9
Q4 Which of t	he groups listed below best describe you? (Choose only one answer)
. 0	American Indian or Alaska Native Asian Black, African American, or Caribbean Hispanic or Latino Native Hawaiian or Other Pacific Islander White (non-Hispanic
Q5	
What is yo	our highest level of education?

Junior High School Graduate High School Graduate 4 year College Graduate Master's Degree **Doctoral Degree Q**6 What is your marital status? Single, never married Married, but separated Married, but not separated Divorced Widowed **O**7 Which of the following best describes your annual household salary? \$25,000 or less annually \$25,001 to \$50,000 annually \$50,001 to \$75,000 annually \$75,001 to \$100,000 annually \$100,001 to \$125,000 annually \$125,001 to \$150,000 annually \$150,001 to \$175,000 annually \$175,001 to \$200,000 annually \$200,001 or more annually

Q8

Have	you	ever participated in a weight loss program?
•	0	Yes No
Q9 List tl	ne w	eight loss programs you have participated in within the past year
•	C	Jenny Craig
•		Weight Watchers
•	0	Keto Diet
•		Other ( write in the answer)
•	0	None
Q10 Which	h of	the following best describes your reason for wanting to lose weight?
•	0 0 0	health reasons to feel better to look better other ( describe) not applicable
Q11 Which	h of	the following conditions do you have? (Check all that apply)
•	000	diabetes high blood pressure low blood pressure kidney problems

•	$\bigcirc$	high cholesterol
•	0	heart problems
•	0	none
□ Q12 How 1	muc	h weight have you lost during the last year?
•	0	10 pounds or less 11 to 20 pounds
•	0	11 to 20 pounds
•	0	21 to 30 pounds 31 to 40 pounds
•	C	41 to 50 pounds
•	0	61 to 70 pounds
•	0	•
•	0	70 pounds or more
•		None
Q13 Did y	ou ii	ntend to lose weight?
•	0	Definitely yes
•	O	Probably yes
•	0	Might or might not
•	0	Probably not
•	0	Definitely not
Q14 How 1	muc	h weight have you regained during the past year?

•	0	31 to 40 pounds
•	0	41 to 50 pounds
•	0	51 to 60 pounds
•	0	61 to 70 pounds
•	0	70 pounds or more
•	0	None
П		
Q15		
How	man	y days out of the week do you exercise?
•	C	1 to 2 days
	O	2 to 4 days
•	O	·
•		4 to 6 days
•	0	7 days a week
•	O	Do not exercise
Q16		
How	man	y minutes of exercise do you get each day?
	0	less than 10 minutes
•	0	
•	~	10 to 20 minutes
•	O	20 to 30 minutes
•	0	30 to 40 minutes

C 10 pounds or less

C 11-20 pounds

C 21 to 30 pounds

•	$\mathbf{Q}$	40 to 50 minutes
•	0	50 to 60 minutes
•	O	60 minutes or more
•	0	None
Q17 What □	type	of exercise do you participate in? (Please enter your answer below)
Q18 What	is yo	our actual weight? (Please enter your answer below)
Q19 What	is yo	our height? (Please enter your answer below)

Thank you for taking time to complete this questionnaire. If you are interested in participating in this research and agree to take a 1 hour interview, please provide the best way that I can contact you.

Richardeanea Theodore,

PhD Student, School of Public Policy Administration, Walden University Minneapolis, Minnesota

Appendix B: Research Questions and Interview Questions

Research Question	Interview Questions
1. How do African	1. Please discuss what your
American women	everyday experience is of
experience overweightness	being overweight or obese?
and obesity in their	
everyday lives?	
2. Do obesity-related	2. How do you think that
policy changes influence	your elected politicians or
weight loss in overweight	the government may help
and obese African American women?	with your desire to lose
	weight?
3. Does physical activity	3. Discuss ways in which
affect weight loss in overweight and obese	physical activity affect weight loss in
African American women?	overweightness and
7 Milean 7 Mierean Women.	obesity.
4. What are the	4. Please share your
determinants of weight loss	thoughts regarding how
success in African	others can or have helped
American women?	you with your weight loss
	efforts.
	5. Please share who else
	you think has helped you
	with your desire to lose
	weight.
	6. Please discuss examples
	of anything that you think
	has helped you in your weight loss efforts.
	7. Please discuss examples
	of anything that you think
	interfered with your weight
	loss efforts.
	8. Please share your
	thoughts regarding which
	factors determine if you
	lose weight or if you gain
	weight.

## Appendix C: Follow-Up Interview Questions

The following questions were used as follow up questions, based on the participants' responses to the main research question:

- Please share your thoughts regarding how others can or have helped you with your weight loss efforts.
- 2. How do you think that your elected politicians or the government may help with your desire to lose weight?
- 3. Please share who else you think has helped you with your desire to lose weight.
- 4. Please discuss examples of anything that you think has helped you in your weight loss efforts.
- 5. Please discuss examples of anything that you think has interfered with your weight loss efforts.
- 6. Discuss ways in which physical activity may affect weight loss in overweightness and obesity.
  - 7. Please share your thoughts regarding which factors determine if you lose weight or if you gain weight.

## Appendix D: Interview Protocol Form

## The Nutrition Labeling Act and the Weight Loss Experiences

## of African American Women

Date
Time
Location
Interviewer
Interviewee
Release form signed?

### **Notes to Interviewee:**

Thank you for your participation in this research study. I believe that sharing your experience with overweightness and obesity will be valuable to this research. The experiences that you share may also help us to better understand the experiences of African American women who are overweight or obese.

Confidentiality of responses is guaranteed.

Approximate length of interview: 60 minutes

## Appendix E: Internet Flyer

# The Nutrition Labeling Act and the Weight Loss Experiences of African American Women



Richardeanea Theodore: Walden University School of Public Policy Administration

My name is Richardeanea Theodore, and I am a doctoral student in the School of Public Policy Administration at Walden University, a fully accredited online University, based in Minneapolis, Minnesota. I am completing my dissertation research on the experiences of Black women on reading nutrition labels and physical activity in their efforts to lose weight. My intent is to conduct one-hour telephone interviews with Black women living in one of the five boroughs of New York City between the ages of 25-65 regarding their lived experience of being overweight or obese ( reading nutrition labels and engaging in physical activity). This study is fully confidential, meaning that you will not be identified in any reports or in any other manner that come from my research and that no one will ever know that you participated in my study. To schedule an interview, after you click on the link below, please complete the questionnaire and provide the best way to contact you to schedule an interview.

If you are a Black woman living in one of the 5 boroughs of New York City and are between the ages of 25-65 years old who have been making efforts to lose weight and would like to participate in a study by sharing your experiences with reading food labels and physical activity, please click the link below to learn more about this study and confirm your eligibility by completing a screening questionnaire.\_\_\_\_\_

Appendix F: Participant Demographics and Data from Interviews

Partici- pant #	Income	Education	Age	Exercise	History	Support/Strategies	Public Policies	Health	ВМІ
P1	75- 100K	College	38	10-20 min. 1- 2 days a week	Lost weight due to self- motivation for wedding	Stress management	Cost of food should be controlled	No health issues	Obese
P2	100- 125K			0-10 min. 1-2 days a week. Walks 6000- 12000 steps on during week in nearby park & uses apps	Regained 21-30 pounds w/in last year	Family supports weight loss but eats at night when alone	Health insurance should be for workouts		Obese
P3	25-50K	High school; will get college degree soon		Not exercising now—no time found to do so	Regained 11-20 pounds last year		Weight loss not an issue of elected politicians but wishes for more friendly parks	Worried about health because father has diabetes	Obese
P4	75- 100K	College		50-60 min. 2- 4 days a week	Regained more than 11- 20 pounds last year— used to jump rope, treadmill but preferred to walk	Worried about health	Losing weight not an issue of elected politicians but healthcare providers	Worried about health	Obese
P5	100- 125K	High school		20-30 min. 2- 4 days a week	Regained more than 11- 20 pounds last year— used to jump rope, treadmill but preferred to walk	Consistent with time management, meal planning/ has toddler at home and peer support	Elected politicians should work on universal prices for primary products		Obese

Partici- pant #	Income	Education	Age	Exercise	History	Support/Strategies	Public Policies	Health	вмі
P6	50-75K			Does not exercise but uses stairs at work—takes kids to park in her work	Regained more than 11- 20 pounds last year	Is in denial about overweight	Elected politicians should provide more resources for Black women, like clubs	Worries about looks and health	Over- weight
<b>P</b> 7	51-75 <b>K</b>			20-30 min. 1- 2 days a week	Regained less than 10 pounds last year	Believes in being mindful about eating and exercising		Worried about health	Healthy
P8	51-75K	Grad school		10-20 min. 1- 2 days a week	Regained less than 10 pounds last year	Attended Weightwatchers and likes walking	Warns about food additives	Worried about health	Obese
P9	100- 125K	High school		30-40 min. 7 days a week	Regained less than 10 pounds last year	Enjoys walking	Elected officials should work on having accurate labeling on food contents	Worried about health	Obese
P10	25-50K	College		10-20 min. 4- 6 days a week	Did not gain weight last year and lost 44 pounds	Enjoys walking and intermittent fasting	Elected officials should restrict some less healthy foods w/ harmful ingredients	Worried about health	Healthy
P11	25-50K	High school		20-30 min. 1- 2 days a week	Did not gain weight last year but now at 248 pounds		Elected politicians should make produce more affordable— people not supported	Worried about looks	Obese
P12	Low at 25-50K	Grad school		Does not exercise	No weight gain last year  – Weightwatchers & had community support	Highly knowledgeable about warnings/ labels.	Proposed several actions for elected officials like green spaces	Worried about looks	Over- weight