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Subclinical Stress on Obesity Among Obese African American Women

Dr. Nosakhare Osasu Idehen
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Walden University

College of Health Professions

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Nosakhare O. Idehen

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Walden University
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Abstract

Subclinical Stress on Obesity Among Obese African American Women

by

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MSc, Capella University, 2010

MD, Our Lady of Fatima University, 2010

BSc, University of Benin, 1993

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Public Health

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Abstract

Obesity is a complex disease linked to genetics, health behaviors, upstream social determinants of health, and psychosocial stress. Obesity-related chronic diseases and opportunity cost significantly impact individuals and communities. Current prevention policies focus on diet and exercise without demonstrating the benefits of stress coping strategies in obesity management. Subclinical racial minority and gender stress heighten hypervigilance, psychological overload, poor stress coping strategies, inflammation, and obesity. Subclinical stress varies with race and gender, and it is higher in African American (AA) women. The purpose of this qualitative study was to explore the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among AA women. An in-depth one-on-one interview was administered guided by phenomenology to a purposive sample of 13 obese AA women ages 45 to 64 in Tallahassee, Florida. A social-ecological model and minority stress theories were used to explore the data. The results of these analyses indicated eight themes: (a) sociopolitical anxiety, (b) systemic racism, (c) otherness identity, (d) hypervigilance, (e) culture, (f) unhealthy habits, (g) avoidance, and (h) social support. Racial minority and gender stress are upstream factors impacting diet, physical activity participation choices, and obesity; interventions should address everyday stress that marginalizes, problematizes, and victimizes AA women. The potential impact for positive social change is sustained awareness of stress-linked obesity risk factors, obesogenic environment, and the social-ecological lens AA women view racial, gender stress, and obesity.

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Dedication

I dedicate this dissertation to my great family: The Idehen clan. First to the family's patriarch, my father, John Iyo. Idehen, my mother, Jane Osemwenkhae, M.O Idehen, and my siblings: Edna, John Emma, Esosa, Leo Igho, Irene, Osaze, Rita, Benedicta, Osaitie, and Daniel, for their understanding and support. Including my special sisters Ngozi, Kate, Rose, and Ebiuwa. To the loving memories of three angels: My father, J. Iyo. Idehen, for igniting my passion for education and paying for it. Aunt Sarah Martin and Patty Merek for supporting my educational goals. As earthly angels, you all put in amazing human services credit hours and earned your wings before today's graduation. My guiding angels, please, spread your wings as I don my cap and gown in your honor.

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Table of Contents

List of Tables.....	v
List of Figures	vi
Chapter 1: Introduction to the Study	1
Introduction	1
Background	3
Problem Statement.....	5
Purpose of the Study	6
Research Questions.....	7
Conceptual Framework.....	7
Nature of the Study	9
Operational Definitions.....	10
Assumptions, Limitations, Scope, and Delimitations	12
Assumptions	12
Limitations.....	13
Scope and Delimitations.....	13
Significance of the Study	14
Summary and Transition.....	14
Chapter 2: Literature Review	16
Introduction	16
Tallahassee, Florida Obesity Problem	19
Biophysical Factors and Obesity	25

Cultural Influences and Obesity	28
Socioeconomic Factors and Obesity.....	35
The Subclinical Stress Paradigm	43
Racial Minority Stress.....	59
Gender Stress.....	68
Theoretical Foundation	75
Subclinical Stress and Obesity-Prevention Strategies	82
Summary and Transition.....	87
Chapter 3: Research Method.....	88
Introduction	88
Research Design	89
Methodology	90
Sample Type.....	93
Research Questions.....	95
Instruments	95
Role of the Researcher	96
Target Population and Participants.....	97
Data Collection Process	98
Data Analysis Process.....	100
Ethical Considerations	101
Summary and Transition.....	103
Chapter 4: Results.....	105

Introduction	105
Research Setting	106
Participant Recruitment.....	108
Study Participants' Demographics Profile	108
Data Collection and Storage.....	111
Data Analysis	114
Data Verification	116
Results of Data Analysis.....	117
Sociopolitical Anxiety.....	118
Systemic Racism.....	122
Otherness Identity	127
Hypervigilance.....	130
Culture.....	135
Unhealthy Habits	139
Avoidance.....	143
Social Support.....	147
Discrepant Findings	151
Summary and Transition.....	153
Chapter 5: Discussion, Conclusions, and Recommendations	155
Introduction	155
Interpretation of the Findings.....	156
Recommendations for Future Research	172

Limitations of the Current Study	173
Implications for Positive Social Change.....	174
Theoretical Implications	176
Methodology Implications	178
Conclusions	178
References.....	180
Appendix A: Research Study Flyer.....	228
Appendix B: Demographic Screening Questionnaire	229
Appendix C: Interview Protocol	233

List of Tables

Table 1. Adults Who Are Obese, Non-Hispanic Black Women.....	22
Table 2. Calculating Body Frame Size	33
Table 3. Study Participants' Profile	110

List of Figures

Figure 1. Adults Who Are Obese, By Age Group.....	21
Figure 2. Conceptual Framework of the Subclinical Stress Paradigm.....	45
Figure 3. The Five Levels of SEM Impacting Subclinical Stress and Obesity.....	77
Figure 4. Modified Colaizzi Data Analysis Method	115

Chapter 1: Introduction to the Study

Introduction

The purpose of this study was to explore the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among African American (AA) women. For decades, the prevalence of obesity as a global public health problem has soared. In the United States, AA women have a higher prevalence of overweight and obesity across all races and gender groups (Ogden et al., 2016; Patton, 2015). This national trend extends to the state and county levels; AA women are 0.58 times more likely to be obese than White women, resulting in an obesity prevalence of 43% rather than 25% among non-Hispanic White women in Tallahassee, Florida (Flhealthcharts, 2020).

The Centers for Disease Control and Prevention (CDC) identified the existing model of obesity etiology as the energy-balance theory, which prescribes a better diet and increased physical activity level (Hill et al., 2012; Mathieu et al., 2012; Sutherland, 2013). However, the energy-balance theory has not successfully addressed obesity among AA women as the prevalence of obesity increases (Hill et al., 2012; Marks, 2016).

A paradigm shift that extends the etiology and prevention of obesity beyond diet and exercise examines psychosocial factors such as the link between obesity and subclinical racial minority, and gender stress may be warranted. AA women are born into two nonmodifiable identities of being "Black" and a woman." At surface value, being a "Black woman" is seemingly not a problem. Still, given the challenges of navigating the post-racial United States, the current imperfect union produces psychosocial stress for

AA women due to membership in the gender and minority racial groups (see Settles et al., 2010). AA women suffer from derogatory prejudice and discrimination and can be devalued and expected to remain invisible in a world controlled by men (Balsam et al., 2011; Graham & McClain, 2019).

Empirical research has shown that AA women, compared to AA men and other ethnic minorities, reported more racism and discrimination experiences and showed higher susceptibility to the intersectionality of race and gender (Richardson & Brown, 2016). Since racism and sexism are ubiquitous in the United States, it is imperative to examine the attitudes, beliefs, and lived experiences of obese AA women with racial and gender discrimination.

Stress is an essential physiological response to any internal and external factor that threatens the body's homeostasis or balance (van Rossum, 2017). The disruption of homeostasis launches the stress response pathway's cascade involving the activation of the hypothalamic-pituitary-adrenal (HPA) axis (van Rossum, 2017). The HPA axis produces and maintains the hormone cortisol. The cortisol action helps the body respond quickly to a stressful event and returns the body to normalcy. Researchers have linked increased cortisol levels in the body with adiposity (Berger & Sarnyai, 2014; Idehen, 2017a; van Rossum, 2017). Poor health outcomes in AA women correlate to perceived race-related stress and gendered stress caused by allostatic load and weathering (Geronimus et al., 2006). However, there is limited knowledge about the intersectionality of racial minority and gender stress on obesity in AA women in Tallahassee, Florida.

In this chapter, I discuss the background, problem statement, and purpose of the study. I outline the research questions, conceptual framework, and the nature of the study. The concepts of operational definitions, assumptions, limitations, scope, and delimitations are explained. Similarly, I reflect on the significance of the study, summary, and transition between the chapters.

Background

Obesity is a complex public health disease, a global epidemic, and a condition with a far-reaching national health burden, including minority health equity implications (Ogden et al., 2017). In the United States, obesity is a common, costly, and deadly disease. Obesity affects 39.8% of US adults, costs an estimated \$150 billion US dollars, and is associated with approximately 300,000 deaths/year (Finkelstein et al., 2009; Hales et al., 2017; Kim & Basu, 2016). AA women are disproportionately affected by obesity, and this obesity trend is consistent across different states (Ogden et al., 2017). The prevalence of obesity among AA women is 43%, which is higher than the 25% among White women in Tallahassee (Flhealthcharts, 2020; Idehen, 2019; Mathieu et al., 2012).

The common risk factors associated with obesity are diet and exercise, including poor education, income, and the environment (Ogden et al., 2010; Sutherland, 2013). However, these factors do not explain the case of middle-class AA women who are highly educated, with good incomes, and living in affluent neighborhoods struggling with obesity and poor health outcomes (Assari et al., 2018). I used a qualitative research design in this study to explore the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among AA women (see Creswell &

Poth, 2017). The burden of living daily with discrimination based on racial and gender stress can create wear and tear on the body, overload the stress hormone regulatory capacity, and cause inflammation linked to obesity (Goosby & Heidbrink, 2013; Ifatunji & Harnois, 2016).

Stress is the body's response to a real or perceived threat to its homeostasis (Marks, 2016). Stress leads to dyshomeostasis via the neuroendocrine pathway. Stress regulates appetite through emotional eating, promotes addiction, and impacts obesity prevalence (Idehen, 2017a; Maniam & Morris, 2012). Social and contextualized psychosocial stress in AA women exerts weathering effects that modify the taste, dietary preferences, and the distribution of adipose tissues, which exacerbate weight gain and obesity (Harding et al., 2014).

The obesity predilection in AA women results in higher morbidity and mortality rates from chronic diseases, including stroke, hypertension, and diabetes (Ogden et al., 2015). Despite these health-related severe outcomes of obesity, there is a dissonance between AA women's lived experience in contrast to the view held by public health and healthcare professionals in defining and understanding obesity (López et al., 2014; Lynch & Kane, 2014). In a study with a sample of obese AA women with a BMI of ≥ 35 , the authors observed that 65% of the participants did not consider themselves obese, contrary to public health BMI guidelines (Lynch & Kane, 2014).

Beyond the differences of opinion held by public health practitioners and AA women in defining obesity, there is also a dichotomy in the preferred obesity prevention strategies (Rand et al., 2017). For instance, practitioners advocate obesity management

programs centered on diet and exercise. In contrast, some AA women living with obesity have voiced a need for programs promoting positive mental well-being (Rand et al., 2017). Thus, there is imperative to undertake qualitative research on the lived experience of subclinical stress on obesity focused on the ecological model to understand how commonplace encounters with racial minority and gender stress may impact obesity among AA women (Berger & Sarnyai, 2014; Marks, 2016).

In this study, I picked the social-ecological model (SEM) and the minority stress theory (MST) as the theoretical frameworks to explain obesity etiologies. Specifically, I researched in the broader context of how sociopolitical and environmental factors impact obesity (see Meyer, 2003; Stokols, 1992).

Problem Statement

In the United States, obesity is more than statistical data; it is the reality behind the countless voices of AA women who have a higher prevalence of obesity-related morbidity and mortality (Ogden et al., 2017). AA women in Tallahassee have an obesity prevalence that is 18 percentage points higher than non-Hispanic White women (Flhealthcharts, 2020). In this study, I explored the lived experience of racial minority and gender stress among obese AA women, including the literature gap (see Rand et al., 2017). The review indicated that few scholars had mentioned the role of stress in obesity (Harding et al., 2014; Marks, 2016). Some have studied obesity and racial identity (Hamilton-Mason et al., 2009; Lige et al., 2017). Others have explored obesity and gender (Woods-Giscombé, 2010). However, not many have examined the combined

impact of subclinical racial minority and gender stress in the development of obesity among AA women (Thomas et al., 2019).

Additionally, researchers have blamed individual diet or physical inactivity for obesity and emphasize low education, income, and socioeconomic status (SES) as the primary risk factors for obesity (DeLany et al., 2014). On the contrary, a high SES does not fully explain or significantly improve obesity risk in educated middle-income AA women (Eggers et al., 2016). Neither has the singular focus on the diet and exercise guidelines, which excludes the role of stress on obesity (Marks, 2016). A better understanding of the impact of racial minority and gender stress on obesity may result in effective prevention and potentially create a positive social change.

Purpose of the Study

The purpose of this study was to explore the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among AA women. Understanding the impact of racial and gender stress on obesity is necessary to explore coping mechanisms and healthy lifestyle changes that AA women can adopt (Agyemang & Powell-Wiley, 2013; Speights et al., 2017). Examining the participant's understandable meaning about the impact of subclinical racial minority and gender stress on obesity is essential to appreciate how they experience daily stressors, use coping mechanisms, and engage in sustainable weight management (López et al., 2014; Stavrou et al., 2016). The information obtained from this study may help develop targeted intervention programs that address the impact of stress on obesity in AA women.

Research Questions

Research Question (RQ)1: What lived experience of racial minority and gender stress exists in a sample of obese AA women?

RQ2: How do the lived experience of racial minority and gender stress impact obese AA women?

RQ3: What factors promote emotional eating and inhibit physical activity participation among obese AA women?

RQ4: What coping mechanisms exist to reduce the impact of racial minority and gender stress on obesity?

Conceptual Framework

The SEM and the MST were the guiding theoretical frameworks for this study. The SEM consists of five nested, hierarchical levels: Intrapersonal, interpersonal, community, organizational, and public policy levels (Bronfenbrenner, 1979). Health outcomes result from the complex interaction between an individual and the SEM multidimensional spheres of influence (Stokols, 1992). For example, the intrapersonal level of influence is the individual characteristics, such as gender, race, and self-efficacy. Next, the interpersonal level consists of family, friends, and peers interacting to shape group identity and support systems (Stokols, 1992).

Moreover, the organizational level represents community organizations like churches. The community level is also an example of social networks characterized by community norms (Stokols, 1992). Finally, the public policy level represents the local, state, and federal spheres of influence with policies, laws, and civil rights that regulate

actions (Stokols, 1992). Thus, the interaction at the intrapersonal, community, and public policy level stressors in places where people live, work, and play may create the risk factors of subclinical racial and gender stress impacting obesity among AA women.

The second theoretical framework was the MST. The MST framework is a cross-contextual approach that presents a composite understanding of the racial minority and gender stress experiences (Meyer, 2003). There are two hypotheses of MST; the first one is the social selection hypothesis that states the health outcomes of minorities are due to inferior genes (Dohrenwend, 1966). The second is the social causation hypothesis, which proposes that minority groups' health is affected by poor social determinants of health, prejudice, and discrimination (Dohrenwend, 2000; Johnson et al., 2019; Meyer, 2003). I used the social causation construct of the MST as the second conceptual framework for my study. The MST explains how cumulative everyday stressors from the intrapersonal, community, and public policy level domains of the SEM relate to the impact of racial minority and gender stress on obesity in AA women.

Furthermore, the MST is the most suitable framework for understanding the impact of stress on the body and the physiological deterioration linked to stress. McEwen (1998) coined the allostatic load theory as the cumulative impact of psychosocial stress on the body and its response to the stressors. In comparison, the weathering theory explains the physiological deterioration in health and predilection to chronic diseases, including a higher prevalence of obesity (Geronimus, 2001).

The phenomenology approach is the data collection and analysis method, which gives the culture-sharing group of AA women participants the platform and support to

paint detailed, thick, and personal accounts of how the lived experience of subclinical racial minority and gender stress impacts obesity (Creswell, 2014; Puhl & Heuer, 2010). Researchers have posited that the lived experience of perceived and contextualized stress due to racial minority and gender discriminations may lead to a significant disruption in the body homeostasis in AA women (Jackson et al., 2016; Richardson & Brown, 2016; Talleyrand, 2006).

The disrupted homeostasis leads to the activation of the HPA axis and the secretion of stress hormones. Repeated racial minority experiences and gender stress are risk factors for increased stress hormone cortisol (Marks, 2016). An unregulated rise in cortisol levels causes a significant increase in calorie intake. An observable effect on cortisol hormone's neurobiology is linked to an intense craving for high energy-dense foods and increased calorie intake. The imbalance of cortisol leads to poor appetite control, emotional eating, abdominal adiposity, and obesity (Idehen, 2017a; Maniam & Morris, 2012; Marks, 2016; Read & Grundy, 2012).

Nature of the Study

The nature of the study was qualitative research with a phenomenological approach. A phenomenological approach was appropriate as I focused on AA women's beliefs and lived experiences of the impact of subclinical racial minority and gender stress on obesity (see Rudestam & Newton, 2015). Additionally, a phenomenological approach unifies the AA women bound by the commonality of a lived experience as a culture-sharing group (see Patton, 2015). The use of phenomenology invokes the exploration and description of the theory of experiences and consciousness (Husserl,

1970). In my study, I used a phenomenological approach for data collection. I elicited the impact of subclinical stress on obesity as consciously experienced by AA women without proving causal explanations. I also accurately described the phenomenon under investigation by staying true to and merely presenting the facts (see Groenewald, 2004).

A phenomenological approach promotes the understanding of how people construct reality (Farina, 2014). The meanings derived from the interviews, written reports, and observations allowed the participants to paint detailed, thick, and personal accounts of their lived experience of the impact of stress on obesity (see Creswell, 2014). Thus, phenomenology is a tool for data collection and highlights the commonality of a lived experience. Likewise, it is used to bracket current understanding while exploring the phenomenon (Patton, 2015).

Using phenomenology gave the AA women the platform to be objective and factual with their reality (see Glanz & Bishop, 2010). The stories told by the obese AA women around their lived experiences set the stage to investigate and describe an in-depth account of the impact of subclinical stress on obesity (see Yüksel & Yıldırım, 2015). Using phenomenology, I examined how AA women's race and gender are potential discrimination sources, cumulative subclinical racial and gender stress on obesity (see Groenewald, 2004; Puhl & Heuer, 2010).

Operational Definitions

Abdominal adiposity: An excessive amount of fat around the stomach area, often referred to as "potbelly," affecting health outcomes (Ford et al., 2014).

Allostatic load: This is the combined harmful effect on the body from exposures to multiple stressful events (Tan et al., 2017).

Body Mass Index (BMI): This is a tool for measuring weight using a formula: The weight in pounds is divided by the height in inches squared and multiplied by a conversion factor of 703. $\text{Weight (lb.)} / (\text{height [in]})^2 \times 703$ (Vogel & Patt, 2017; World Health Organization, 2020).

Cortisol: This is a natural hormone in the human body released during a stressful period (van Rossum, 2017)

Gender minority: Refers to a person's social identity that correlates with assigned sex at birth or can differ from it (e.g., male or female), which is numerically or socially less than the dominant gender (Lewis & Neville, 2015).

Homeostasis: This is how the body receives and responds to stress to maintain a balance in all its systems, avoid adverse health outcomes, and ensure survival (Marks, 2016).

Hypothalamic-pituitary-adrenal (HPA) axis: These three organs, the hypothalamus, the pituitary, and the adrenal glands, secrete the stress cortisol when the body is under stress (Read & Grundy, 2012).

Intersectionality: The prejudice and discrimination of individual experience when race and gender are the barometers for judgment (Richardson & Brown, 2016).

Lived experience: This is the understandable meaning of an individual who reflects on the knowledge gained after living through an experience (Given, 2008).

Obesity: A medical condition with excessive fat accumulation that is a risk factor for health and well-being. Having a BMI of ≥ 30 kg/m² is diagnosed as obesity (Kyle et al., 2016).

Phenomenology: The belief, attitude, and lived experiences of reality as narrated from the first-person perspective (Farina, 2014).

Racial minority: This refers to a racially and culturally different group that is fewer in numbers and ethnically distinct from the country's dominant group (Chauvet-Gelinier & Bonin, 2017).

Social-ecological model (SEM): The multilevel sphere of influence exerted on individuals from the interactions of personal, family, and sociocultural environment (Bronfenbrenner, 1979; Tehrani et al., 2016).

Subclinical stress: Occurs when an individual experiences distress symptoms (e.g., racial minority and gender stress), which does not rise to the threshold of clinical diagnosis of stress (Helms et al., 2017).

Assumptions, Limitations, Scope, and Delimitations

Assumptions

In this study, I assumed that the participants experienced racial minority and gender stress, did not seek mental health treatment, and presented the risk factor for obesity. I also assumed that the stress linked to obesity was not due to the burden of low SES or stress-inducing debilitating physical or mental health conditions. An additional assumption was that the participants would provide accurate and honest responses

without bias and that the measuring instruments would capture the reality of their lived experiences.

Limitations

This study's limitations included the nonrandomized nature of the samples. The sample was obtained through nonprobability purposive sampling and a snowball sample. This limitation was a potential weakness because the participants were not representative of all obese AA women in Tallahassee, Florida. The communities in and around Tallahassee previously experienced population displacement due to Hurricane Michael that affected the area. The views expressed by the participants represented only a cross-sectional snapshot of their lived experiences of racial minority and gender stress on obesity that may not be replicable in future research studies.

Scope and Delimitations

By design, my study was limited in scope to obese AA women ages 45 to 64 who lived in Tallahassee, Florida, and were exposed to racial minority and gender stress. This group had the largest percentage of obesity prevalence across all races and age groups in Florida, ages 18 to 44 (28.8%), 45 to 64 (35.4%), and then 26.5% for ages 65 and older (Flhealthcharts, 2020). Additional inclusion criteria were college-level education, a paid job, and a permanent home address. Exclusion criteria were a BMI less than 30 kg/m², mental health disorder diagnosis, and inability to recall racial minority and gender stress experiences. The defined scope facilitated examining the lived experiences of subclinical racial minority and gender stress on obesity in AA women.

Significance of the Study

Researching the lived experiences of racial minority and gender stress among AA women is significant because of the higher obesity rates among AA women than non-Hispanic White women. Several biological correlates, including repeated exposure to the stress hormone cortisol, are associated with obesity (Agyemang & Powell-Wiley, 2013; Foss & Dyrstad, 2011; van Rossum, 2017). The study is significant because it may raise awareness about the impact of stress on obesity among AA women. Also, my research may help to develop capacity, agency, and stress coping skills among AA women with the potential to reduce obesity prevalence, including using SEM approaches to move obesity prevention strategies beyond diet and exercise only programs. Evidence-based guidelines by public health researchers have suggested that diet, physical activity, education, income, or SES affects obesity in the general population (Go et al., 2013; Johnson et al., 2019). Among AA women, high SES does not offer protection against obesity as educated, middle-income AA women are about as obese as those with low SES (Eggers et al., 2016; Walker & Gordon, 2014). My study may result in positive social change if the ideas generated create strategies with actionable steps that promote dignity, improve AA women's human conditions and lead to community development (see Cibula et al., 2003; Hodson et al., 2002).

Summary and Transition

AA women have a higher prevalence of obesity than AA men and non-Hispanic White men and women. This disparity is due to higher rates of self-reported racial minority and gender-based stress, contextualized stress, and poor stress coping strategies

linked to hormonal imbalances from high cortisol levels and obesity. This chapter contained several foundational sections, and the background was a representative but non-exhaustive list of relevant literature that supported the problem statement. The problem statement addressed the study's problem and the knowledge gap and justified the investigation. Similarly, the study's purpose aligned with exploring the understandable meanings of the impact of racial minority and gender stress on obesity among AA women. Using the research questions, a conceptual framework, and a phenomenological approach to data collection and analysis, I outlined the study objectives and how I accomplished them by exploring the meanings participants ascribed to their experiences. The study's significance may demonstrate an original contribution to stress-linked obesity research with the potential for a positive social change.

In Chapter 2, I outline the literature review, which summarizes and synthesizes the original works and relevant literature on the lived experiences of the impact of racial minority and gender stress on obesity in obese AA women. In this chapter, I review the different risk factors of obesity. I highlight racial minority and gender stress as significant factors impacting obese AA women, examining how the understanding fits into the scholarly narrative and potentially positioning my research to contribute to knowledge and create positive social change.

Chapter 2: Literature Review

Introduction

The purpose of this study was to explore the lived experience of racial minority and gender stress as significant factors impacting obesity among AA women. Obesity is a global health problem with severe national and individual implications. Hence, there are 3.4 million deaths linked to overweight and obesity, 3.9% years of lost life, and 3.8% of disability-adjusted life-years (Ng et al., 2014). Among all adults in the United States, obesity affected approximately 93.3 million people (Ogden et al., 2017). Also, only 34% of AA women meet the recommended physical activity guideline rather than 49.8%, respectively, among non-Hispanic White women (Flegal et al., 2016; Williams et al., 2018; WHO, 2020).

Non-Hispanic White women in Tallahassee, Florida, are 0.42 times less likely to be obese, yielding an obesity prevalence of 25% rather than 43% among AA women (Flhealthcharts, 2020). The higher prevalence of obesity among AA women than the general population places them at greater risk for obesity-related conditions such as stroke, hypertension, and diabetes (Flegal et al., 2016; Idehen, 2019; Ogden et al., 2016).

Despite these health-related severe outcomes of obesity, there is a dissonance between the lived experience of obesity by AA women, public health professionals, and health care providers as they classify obesity, define its complex etiologies and develop effective intervention programs (López et al., 2014). There is imperative to understand all factors that contribute to obesity besides the most cited diet and physical activity (DeLany et al., 2014). Extant literature on obesity etiologies has pointed to poor diet and

exercise (Baruth et al., 2014; Ogden et al., 2014), low-level of education, income, and food desert (Lemacks et al., 2013), and the effect of life-course socioeconomic deprivation (James et al., 2006). A gap identified in the literature exists in understanding how and why subclinical racial and gender stress impacts obesity among AA women.

The minority statuses of AA women are identities they were born into as Black women. Although these demographic characteristics of race and gender are innate traits, racial minority and gender-based stress are controllable. These stressors are a form of everyday psychosocial stress that is cumulative, perceived, and contextualized (Agyemang & Powell-Wiley, 2013; Jackson et al., 2016). Talleyrand (2006) opined that AA women face additional daily pressure from racism and discrimination, leading to emotional eating, weight gain, and increased BMI compared to women of other racial groups. Researchers have found that food is a powerful reward system (Marks, 2016; Singh, 2014). Besides the gratification received from eating, food consumption increases dopamine, activating the reward center. Also, repeating this cycle causes the brain to override the satiety center and allow a repeat experience of the additive pleasure of eating and activating stress hormones (Singh, 2014).

Emerging obesity research has found a link between the increased stress hormone named cortisol, which is involved in fat metabolism, storage, and obesity (Jackson et al., 2017). Daily cumulative stress is a form of social stress, which Ilfeld (1977) identified as a contextual type of anxiety based on the subjective experiences of how individuals perceive themselves, the beliefs that others have about them, and the treatment they receive from others. In the last 5 decades of examining the link between social stress and

chronic diseases, researchers have agreed that social stress leads to several adverse health outcomes, such as depression, diabetes, and cardiovascular diseases (Ilfeld, 1977; Joseph & Golden, 2017; Kivimäki & Kawachi, 2015).

Some researchers have suggested the association between racial and gendered stress, cortisol dysregulation, and emotional eating with obesity (Maniam & Morris, 2012; Marks, 2016; van Rossum, 2017). I examined the impact of racial minority and gender stress using the five levels of the sphere of influence of the SEM and the MST through the lens of allostatic load and weathering theories (see Geronimus, 2001; McEwen, 1998; Meyer, 1995). The US national public health policy objectives for obesity prevention are decreasing calorie intake and increasing energy expenditure (Hill et al., 2012). Many AA women are unaware that the same stress that causes other physical and mental health conditions can be a risk factor for overweight and obesity (López et al., 2014; Rand et al., 2017). A literature gap exists in the knowledge base regarding how lived racial minority and gender stress affects obese AA women.

This chapter includes the literature addressing stress, obesity, and subclinical stress, which are everyday cumulative stressful events that impact the prevalence of obesity in AA women. This literature reviewed calls for additional studies to increase awareness of the link between subclinical stress and obesity, improve stress coping skills in AA women, and create stress-linked obesity prevention strategies by public health researchers.

The literature search strategy involved searching through several databases for peer-reviewed articles and seminal works relevant to this study: CINAHL, EBSCOhost,

ERIC, Google Scholar, MEDLINE, PsycARTICLES, PsycINFO, and SocINDEX. These were the keywords search used in this study: *African American women, racial minority and gender stress, racial and ethnic discrimination, intersectionality, body mass index, allostatic load, weathering, obesity, minority health, and Black women.*

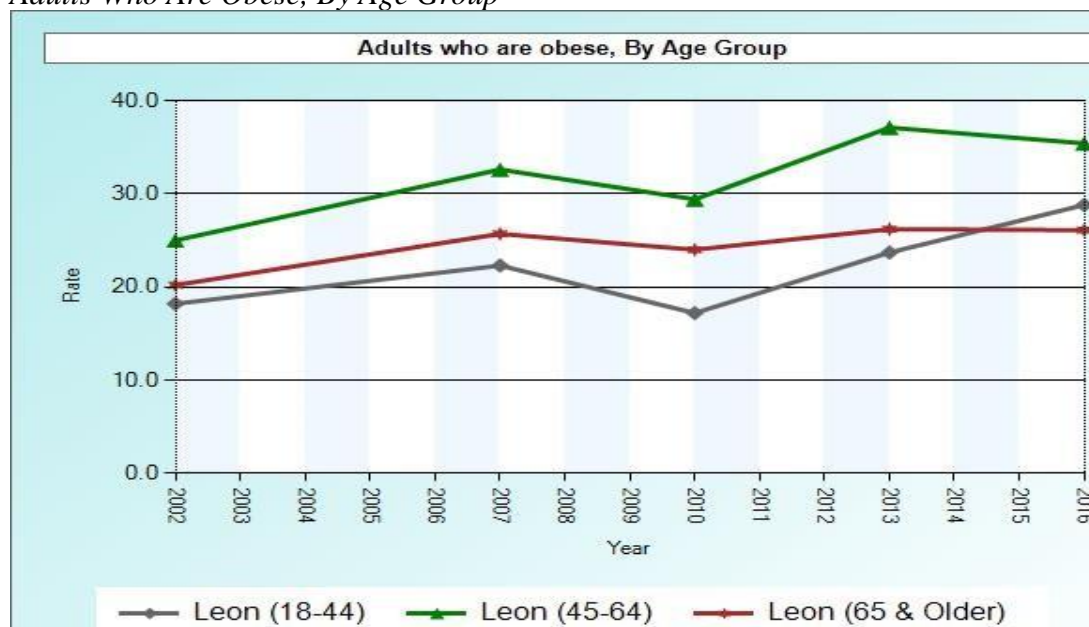
Tallahassee, Florida Obesity Problem

A place is more than a geographical location. A place is a social ladder in the risk factor assessment of diseases' etiologies in a population. Place matters. The selection of Tallahassee, Florida, was significant to my study because of its unique AA population and the historical antecedent in the microcosm of slavery. The legacy of AA women living in a race-conscious society with potential implications for stress-linked obesity, health promotion, and disease prevention bore another significance (see Rivers, 1981; Waters et al., 2015).

Per the historical record, Tallahassee became Florida's capital because of its centrality to the colonial masters. In those days, the slave masters lived in Florida's two largest cities, Pensacola and St. Augustine (Rivers, 1981). Originally, Tallahassee was an agricultural community where the Apalachee Indians and the Mississippian farmers produced their goods. Soon it morphed into a large commercial city for colonial plantations, cotton production, and the slave trade (Rivers, 1981). Large populations of Blacks worked as slaves in the vast plantations and cotton fields. Also, archived records showed that 73% of Black residents were slaves, and a handful of free-living Blacks were residing in Tallahassee during the 19th century (Rivers, 1981).

The demographic characteristics of many cities and their population changes over time, and such is the case with Tallahassee. Census data from the US Census Bureau showed that AAs make up about 34% of Leon County's population. Although this is a huge reduction from the slavery-era population size, it is still a large percentage of AAs, which doubles their representation in Florida, where AAs represent 17% of the population (Census Bureau, 2019; Rivers, 1981). The city of Tallahassee, with 172,574 residents, is the seat of power for Leon County, which is Florida's second-largest county, with a population of 250,000 and also the capital city of Florida, which is the third-largest state in the United States, with a population of 21,312 million, accounting for 6.5% of the US population (Census Bureau, 2020). The prevalence of obesity in Florida is ranked 35th among the 50 states in the United States (Warren et al., 2018).

Leon County, Florida, is also ranked 35th among the 67 counties in Florida (Flhealthcharts, 2018a). Also, in county-level data, the agency showed that 76.3% of AA adults are overweight or obese rather than 60.3% of White adults (Flhealthcharts, 2018b). Moreover, 40.6% of AA adults are obese rather than 27.4% of White adults (Flhealthcharts, 2018b). Figure 1 shows the adults who are obese, broken down by age group. The age group of 45 to 64 (35.4%) has a significantly higher obesity prevalence across all races and age groups in Florida over the age groups 18 to 44 (28.8%) and 26.5% for ages 65 and older (Flhealthcharts, 2020).

Figure 1*Adults Who Are Obese, By Age Group*

Note. The rate only measures county data by quartile. Leon County is in the second quartile for this measure. Adapted from 2020 Adults Who Are Obese in Leon county. Florida Department of Health, Division of Public Health Statistics & Performance. Florida Charts, 2020.

<http://www.flhealthcharts.com/Charts/Brfss/DataViewer.aspx?bid=6>. In the public domain.

Obesity is a health risk to the community, with rates worse than many other Florida parts regarding health equity. The obesity prevalence gap is 19.22%, second only to Gadsden County (the only majority AA county in Florida) with 24.1% (Flhealthcharts, 2018c). In Tallahassee, with a large AA population, there is a high prevalence of obesity (Flhealthcharts, 2018d). Again, place matters. A statewide obesity health risk data identified obesity as a public health problem, with 1 in 4 ruled as obese (Cohen et al., 2013). By this standard, the obesity rate has increased 64.6% in the last 12 years, mostly in the Tallahassee metro area (Cohen et al., 2013).

AA women are 0.58 times more likely to be obese than White women (see Table 1), resulting in an obesity prevalence of 43% rather than 25% among non-Hispanic White women (Flhealthcharts, 2020). Within all these census data and numbers lie the significant takeaway that AA women in Tallahassee, Florida, have a higher rate of overweight and obese, which is 18 percentage point higher than that of non-Hispanic White women in the general population (Flhealthcharts, 2018d).

Table 1

Adults Who Are Obese, Non-Hispanic Black Women

Year	Leon	Florida
2002	25.0% (14.3 - 35.7)	39.3% (33.1 - 45.6)
2007	43.3% (30.4 - 57.1)	39.0% (34.2 - 44.1)
2010	37.2% (20.7 - 53.7)	40.7% (35.3 - 46.2)
2013	47.6% (32.4 - 62.8)	38.6% (33.7 - 43.4)
2016	43% (31.6 - 54.4)	35.2% (30.2 - 40.1)

Note. In 2016, in Leon County, 43.0% of Non-Hispanic Black Women who are obese can be compared to 35.2% statewide. Adapted from 2020 Adults Who Are Obese, Non-Hispanic Black Women in Leon county. Florida Department of Health, Division of Public Health Statistics & Performance. Florida Charts, 2020. <http://www.flhealthcharts.com/Charts/Brfss/DataViewer.aspx?bid=6>. In the public domain.

Social determinants of health, zip codes, and health inequalities in the places where people live ultimately affects health outcomes (Daniel et al., 2018). In one of the

few seminal obesity studies to be conducted with AA women research subjects in Tallahassee, Leon County, López et al. (2014) opined that there is indeed a disparity in obesity prevalence along racial/ethnic and gender lines that disproportionately affects AA women. Additionally, several mitigating psychosocial conditions proximal and local to AA women in Tallahassee were significant risk factors for the prevalence of obesity (López et al., 2014). The authors acknowledged the obesity-related risk factors which the study participants identified as income, jobs, and economic opportunities, including the role of single-parent household stress (López et al., 2014).

There are some arguments against the role of stress as a risk factor for obesity in AA women. Some critics suggest that everyone deals with varying degrees of stress in life, which is not limited to AA women (American Psychological Association APA, 2015). However, the life-course exposure of AA women to racial and gendered stress environments may be a risk factor fostering a disproportionate increase in the morbidity and mortality associated with obesity (Cozier et al., 2014; Fowler-Brown et al., 2009). This gap between the opinions of public health practitioners and AA women suggests a misunderstanding of the impact of stress on obesity and how the development of stress coping strategies by obese AA women can potentially improve their health outcomes (Harding et al., 2014; Idehen, 2017b; López et al., 2014; Waters et al., 2015).

A great way to possibly evaluate AA women's health outcomes in Tallahassee, Florida, requires an analysis of the Leon County, Florida community health profile (see Flhealthcharts, 2018a). County health profiles provide quality health indicators, demographic information of the residents with community assets, and highlight the

potential risk factors for diseases affecting the quality of life (Soriano, 2013). Data from the behavioral risk factors for Leon County shows that 11.7% of the population has poor mental health on 14 or more of the past 30 days, plus 16.4% who reported inability to engage in physical activity on 14 or more of the past 30 days due to physical or mental health issues (Flhealthcharts, 2018a).

Tallahassee's median household income is about \$42 418 compared with the national average of \$53,000 (Flhealthcharts, 2018a). Thus, the percentage of individuals living below the poverty line is 23.3%, almost double that of the national average of 13.5 % (Census Bureau, 2020). AA women have the lowest life expectancy of 76.8 years, which is lower than that of non-Hispanic White women and the national average of 81.2 years (Census Bureau, 2019; Go et al., 2013; Levi et al., 2014). The theory among researchers is that exposure to stress increases allostatic load markers that 'withers' AA women, leading to increased susceptibility to chronic diseases such as obesity and other poor health outcomes (Beauboeuf-Lafontant, 2003; Geronimus, 2001; McEwen, 1998).

Amongst the racial/ethnic AA women in Tallahassee, many speak English, French, and Creole, or Spanish due to their African, Francophone, Haitian, Dominican, or Spanish ancestries (Black City Info, 2017; Census Bureau, 2020). For many of these AA women, the high school graduation rates are as low as 72.3 %, which is significantly lower than the 92.1 % for women of other racial groups in this area (Census Bureau, 2020). Florida A & M University was created from the old college for colored students (Rivers, 1981). Tallahassee is now home to more colleges like Florida State University, Tallahassee Community College, and Florida A & M University (Rivers, 1981).

Researchers hope that the presence of the state's oldest and largest historically Black college will motivate more AA women to get an education, develop stress coping skills, and improve their quality of life (see López et al., 2014; Rivers, 1981).

Regardless of their education level, AA women are still lumped together as just "Black women." AA women earn less per dollar than non-Hispanic White men and women for an equal amount of work (Census Bureau, 2019). This gendered racism stigma is due to the intersection of race and gender that places AA women less than a non-Hispanic White woman of equal qualification (Woods-Giscombé, 2010). In this study, I provided a platform for a sample of obese AA women to provide insight into their lived experience of racial minority and gender stress as potential risk factors for obesity. Understanding the natural setting where AA women live was an essential step in exploring racial and gender stress.

Biophysical Factors and Obesity

It is unequivocal that the obesity epidemic has affected all Americans, but even more astounding is realizing that it hit AA women the hardest (Ogden et al., 2016; Pan et al., 2009). This uneven distribution of obesity disease burden among racial/ethnic groups within the United States lends credence to the conceptualization that perhaps the biological model plays a significant role in the prevalence of obesity in AA women. Several researchers have established the correlation between obesity, genes, and metabolism (see Agyemang & Powell-Wiley, 2013; Smith et al., 2018; Zhao, Wineinger, et al., 2012). Stakeholders are interested in understanding how race and genes are associated with obesity. For example, if there is evidence that the AA genetic assortment

leads to a higher obesity prevalence. One conclusion derived from Agyemang and Powell-Wiley (2013) is that the fault is not in the AA gene. Rather, biophysical interaction with environmental factors, including life course exposure to stress and gender characteristics, may provide an explanatory model.

Monda et al. (2013), in a study conducted on both Black and White women, identified single nucleotide polymorphisms rs17366568 in the *ADIPOQ* gene to be associated with the adiponectin levels in White women and not in AA women. The authors suggested that AA women in the study have lower adiponectin. A low adiponectin level is associated with higher visceral tissue adiposity or obesity (Monda et al., 2013). In a population-based Jackson Heart study, a sample of 5,300 cohorts of African Americans (AAs) with 64% of AA women $n = 2,799$ participants provided insight into the role of gender in obesity (Bidulescu et al., 2013). The authors observed a gender-specific association between adiponectin and visceral tissue adiposity. Compared to men, AA women have lower adiponectin levels and higher visceral tissue adiposity. Significant gender differences in adiponectin levels are associated with obesity and other AA women's comorbidities (Bidulescu et al., 2013).

Empirical studies support the significant role played by adipose-derived leptin through the concept of the leptin hypothesis in obesity etiology (Lu, 2007; Yamada et al., 2011). In the leptin hypothesis, individuals who are obese have leptin tolerance, experience signal disruption, and a failed satiety relay message when the stomach is full (Lu, 2007). As part of metabolism, there is a release of leptin during the intake and digestion of food. One of the leptin functions is to relay a signal to the hypothalamus that

the stomach is full. Therefore, a lower level of leptin thus represents this satiety-regulating hormone's diminished capacity to control food cravings (Lu, 2007). The authors suggested that the leptin hypothesis highlights the role of leptin in mood and emotions. Researchers also suggest that adipose-derived leptin functioning through intracellular signal transduction pathways acts as antidepressants and can mediate subclinical psychosocial stress, impacting obesity (Lu, 2007).

Yamada et al. (2011) opined that the concept of leptin resistance modulates stress-induced obesity through energy regulation and leptin level control of the cerebral cortex and hippocampus. The researchers suggest that the absence or low levels of leptin in AA women affect the body's ability to decrease food intake and increase energy expenditure (Yamada et al., 2011). A diminished central nervous system leptin level is associated with stress-induced obesity because the central nervous system leptin provides an antidepressant-like activity in the hippocampus (Lu, 2007). When there is an adequate amount of circulating leptin hormone in the body, energy homeostasis is optimal, mood and emotions are regulated, reducing food intake (Yamada et al., 2011).

Reviewing these explanatory models that explain the prevalence of obesity among AA women, Monda et al. (2013) posited that it was the genetic makeup of Black women with lower adiponectin levels. Bidulescu et al. (2013) suggested that the gender of Black women was responsible. The leptin hypothesis is another explanatory model that suggests that Black women have lower leptin levels (Lu, 2007; Yamada et al., 2011). However, suppose the defect was simply racial (Black race). In that case, these models do not account for Black women of African and Caribbean origin who have lower BMI than AA

women (Sutherland, 2013). Although the biophysical factors examined through genetics, leptin hypothesis, and leptin resistance provide some explanations; they are not enough to explain the complex nature of how racial minority and gender stress impact obesity in AA women. Thus, there is a need to examine cultural practices that differentiate a Black woman of African and Caribbean origin from a native-born AA woman in the United States.

Cultural Influences and Obesity

Cultural practices play a significant role in the etiology of chronic diseases; therefore, understanding the origin, norms, and beliefs of a study population may provide great insights into obesity (Agyemang & Powell-Wiley, 2013; Schneider, 2011). The origin of obesity amongst AA women by some account date back to the ancestry and the cultural norms of Blacks in the Africa continent and specifically in many West African nations (Geyen, 2012). An example of this concept is the cultural belief in many African cultures that a full-figured woman is the perfection of beauty and health (Etuk, 2014). A similarity exists between the cultural idea around bodyweight held by tribes in the African continent and the views of many AAs in the United States, where an AA woman who meets the clinical definition for obesity is considered beautiful, well endowed, and highly desired by Black men (Etuk, 2014; Puoane et al., 2010).

Consequently, the significance of how Africans' cultural practices influence AAs' health-belief ranges from cultural acceptance of a large body frame type or under-classification of a weight category to the value placed on hair care. Other impacts are a lack of non-leisure physical activity and the misrepresentation of body weight (see Hall et

al., 2013; Robinson, 2011). Compared to non-Hispanic White women, AA women have cultural norms and belief systems that affect the perceived severity of obesity morbidity and excessive gestational weight gain and the diet or obesity metaphor (Agyemang & Powell-Wiley, 2013; Ahluwalia et al., 2008).

To further demonstrate how Africa's cultural practices around body image potentially shaped the culture of obesity acceptance among AAs in the United States, consider the following example. In Nigeria's Niger-Delta region, the Efik-speaking people have a custom known derisively as the Efik "fattening rooms." The culture initiates age-appropriate young women into a glamorous cultural celebration, which involves "well-endowed" women dancing before their entire communities to attract potential male suitors (Etuk, 2014).

Etuk (2014) opined that young women were groomed between six months to one year in the fattening rooms by older women in the community. The grooming purpose was to teach and help the devotees attain the cultural standards of beauty, sexual skills and perfect the other gender-specific roles in their future marital homes. In the fattening rooms, the young women must remain inactive; they are continuously fed and pampered to ensure that they gain the maximum weight to look beautiful and attractive (Etuk, 2014). The appearance of these goddess-like young women ("Mbobi" in Efik language) who achieve a makeover-like appearance after approximately six months of inactivity, binge eating to gain weight, and skin cleansing produces an allure in the minds of the culture-sharing group that persist to this day (Etuk, 2014). Thus, cultural practices across many West African countries such as Ghana, Nigeria, and Sierra Leone encourage

positive body image with increased BMI. In particular, the Efik tribe fattening room in Nigeria may offer insight into why the self-reported positive body image is high among Black women (Locke & Bailey, 2014).

Cultural practices have implications for diet, health, and wellness (Ogden et al., 2016). The Efik's bridal custom is harmless. Still, the celebration involves practices linked to the risk factors for obesity among AA women. For example, excessive food intake, physical inactivity, and high body image perception. Other factors include community acceptance of larger body size and male suitors' approval (Ahluwalia et al., 2008; Etuk, 2014).

A nuanced notion is an irony that a fattened up West African woman is the paragon of beauty, life, and prosperity is a cultural relic from the slave era when slave owners in America paid a premium price for heavysset AA women as better commodities (Geyen, 2012). Although times have changed, and slavery has long ended, the past has not changed because it influences AA women's body image perception. The noticeable difference is that the once priced workhorse large-framed body of the slave-era AA woman is now the euphemism for today's obese AA women.

The shift in popular culture and public health promotion messages regarding what constitutes healthy bodyweight confuses AA women previously led to believe that their large build equates to strength and vitality (Geyen, 2012). Yesterday's legacy of slavery echoes today's racism and discrimination at the personal, social, and institutional levels experienced by AA women with potential implications for stress and obesity (Greer et al., 2009; Waters et al., 2015). Yet, most obesity researchers' primary focus is not on the

transgenerational impact of slavery, racism, and discrimination but rather on failed personal choices at diet and physical activity (Nestle & Jacobson, 2000; Woods-Giscombé, 2010).

Critical obesity studies have predominately focused on modifiable individual-level behaviors, especially those related to dietary intake and energy expenditure as determined by the level of physical activity and rightfully so (see Idehen, 2019; Lemacks et al., 2013; Ogden et al., 2016). Researchers suggest that the excessive intake of high calorie, high fat, and energy-dense foods contributes to the increased prevalence of obesity in AA women (Mathieu et al., 2010; van Rossum, 2017).

The health impact of obesity prevalence is severe and personal among the AAs who make up 35.3% of Tallahassee (Levi et al., 2014). The attention given to dietary intake is understandable. Researchers have demonstrated that AA women compared to non-Hispanic White women consume more sugar-sweetened drinks, potato chips, and red meats. These products are associated with weight gain and reduce the intake of healthier whole grains, fruits, and vegetables (Malik et al., 2013; Mozaffarian et al., 2011).

The health beliefs and cultural norms about obesity affect food intake and the desire for leisure-time exercise activities. In AA cultures, food and eating together represents a time of family celebration of love, friendship, and togetherness with little regard to the health benefits or calorie contents, which impacts obesity (Ahluwalia et al., 2008; Etuk, 2014). When AA women cook foods like fried chicken, chitterlings, macaroni and cheese, collard greens with pig feet, ham hock, sweet potato pie, and cornbread, they realize that they are not healthy fruits and vegetables. The health belief

around the susceptibility to obesity and the severity of what high calories, high fat, and energy-dense foods will do to the body may partly explain food choices (Ahluwalia et al., 2008). However, these foods represent more than their numeric caloric values. They represent a symbol of resilience and cultural identity with an ancestral heritage. The early slaves and their descendants learned to bond around food as "soul foods" moments of temporary pleasure while enduring the turmoil of slavery around them (Geyen, 2012).

The lived experience of AA women was in line with the historical views held by tribal groups in Africa in the belief that an overweight or obese Black woman is just "big, Black, and beautiful" (BBW) but not obese (Ahluwalia et al., 2008; Etuk, 2014). Others used obesity metaphors that mitigated the serious stigma that was otherwise associated with obesity by referring to an overweight woman as just "big-boned" (Ahluwalia et al., 2008; López et al., 2014).

Only 15% of people have a larger than average skeleton (see Table 2). Most bodyweight is carried in soft tissues. Thus, big-boned results in a couple of extra pounds but not for obesity (Vorvick, 2018). Researchers observed that AA women who have a higher prevalence of obesity than non-Hispanic White women are more likely to under-report the correct weight, experience higher weight gain, and engage in poor weight management (Lynch & Kane, 2014).

Table 2*Calculating Body Frame Size*

Height	Wrist Circumference	Body Frame
Under 5" 2.'	<5.5"	Small
	5.5-5.57."	Medium
	Over 5.75"	Large
5"." to 5"-5.'	<6.06.25."	Small
	6.0-6.25."	Medium
	Over 6.25"	Large
Over 5" 5.'	<6.25"	Small
	6.25-6.5."	Medium
	Over 6.5"	Large

Note. Body frame size in women is determined by wrist circumference and height. Only about 15% of people have a larger or smaller than average body frame, and being "big-boned" accounts for only about 2 pounds. Adapted from Vorvick, 2018 *Calculating Body Frame Size*, by US National Library of Medicine, 2021 (<https://medlineplus.gov/ency/imagepages/17182.htm>). In the public domain.

Although there is a similarity of belief among AA women and their ancestral kin in Africa, there is a contradiction between AA women's view of obesity versus the definition presented by public health practitioners (López et al., 2014). In a cross-sectional survey conducted by Lynch and Kane (2014) with 69 low-income AA women in a Chicago neighborhood, 13% of the participants had a healthy weight (BMI 18.5–24.9). The percentage of overweight participants was 31% (BMI 25–29.9), another 31% was obese class 1 (BMI 30–34.9), while the final 25% was obese class 2 or 3 with a BMI > 35 (Lynch & Kane, 2014).

Lynch and Kane's (2014) study aimed to understand how AA women medically define body size independent of their weight judgments. The researchers told the participants that doctors use the terms such as "overweight/obese" to represent individuals whose body size is too large for their height. Based on the Body Image Scale, the participants were then asked to select the body size they perceive as obese, too fat, or the body size that looks most like them (Lynch & Kane, 2014). The researchers found that 56% of overweight and obese women did not describe their body size as overweight, too fat, or obese (Lynch & Kane, 2014).

Consequently, the cultural threshold for overweight and obesity among AA women appears to be 10 points lower than the medical classification of obesity by BMI measurement used by public health practitioners and primary care physicians (Lynch & Kane, 2014). This perception gap may contribute to the cultural acceptance of obesity in AA women. This research's relevance is that there are significant differences between the health promotion ideology of public health and AA women's health-related beliefs about overweight, obesity, and body image.

In previous obesity research studies that used a similar Body Image scale, researchers also concluded that 40% of AA women who are obese or overweight consistently assessed their weight within healthy BMI (Bennett & Wolin, 2006; Dorsey et al., 2009). Similarly, based on recent study results, researchers noted that approximately 40% of AA women experience gestational weight gain and are prone to postpartum weight retention than non-Hispanic White women (Holland et al., 2015). However, some researchers in another study suggest that unlike White women unsatisfied with their

postnatal weight gain, low-income AA women are comfortable with their pre and postnatal weights. They also hold the cultural belief that promotes increasing dietary intake during pregnancy (Herring et al., 2012). Additionally, the family's matriarch reinforces this belief that gestational weight gain is necessary for fetal health and well-being (Headen et al., 2012).

Public health and clinicians have defined and documented the medical classification of obesity by BMI measurements (Ogden et al., 2017; Schneider, 2011). The lived experience of obesity by obese AA women could play a significant role in the prevalence of obesity and overall health outcomes because their beliefs, attitudes, and experiences ultimately shape reality. AA women believe that the larger body size is unique, healthy, and culturally accepted as the standard of beauty and sexuality among Black men and the Black community (Crowther et al., 2010; Fitzgibbon et al., 2009).

Moreover, AA women having a higher satisfaction with their body size regardless of their BMI is protective against eating disorders. Consequently, there is a lower prevalence of eating disorders such as anorexia and bulimia and a higher prevalence of obesity in AA women than non-Hispanic White women (Schuler et al., 2008; Swanson et al., 2011).

Socioeconomic Factors and Obesity

Among women of other racial groups, the prevalence of obesity decreases with higher SES such as education, income, and employment, but in AA women, this relationship is complex and different as SES does not significantly reduce the prevalence of obesity (Ogden et al., 2017; Pavea et al., 2016). Obesity is a complex, multifactorial,

and fundamentally preventable disease, researchers studying obesity in adults suggest a significant correlation between obesity and an individual's SES (Ogden et al., 2016). Adler et al. (1994) opined that SES is a tool for measuring an individual's economic, social, and employment status. Psaki et al. (2014) conceptualized SES as a theoretical construct that measures an individual, family, and community's social and economic position relative to others, which has proximal psychosocial and biophysical health risks that impact health outcomes, including obesity.

There is a notable hypothesis that obesity and SES are inversely associated variables (Sobal & Stunkard, 1989). Obesity was referred to as the "affluent disease" in earlier research (Sobal & Stunkard, 1989; Wang, 2001). In recent times, the prevalence of obesity is a bit more nuanced, and it cuts across diverse racial/ethnic groups, creeds, and geographical locations (Ogden et al., 2017). Given this complexity, it is more accurate to state that the prevalence of obesity varies across countries with different SES levels. Researchers suggest that obesity in China, Russia, and some developing countries is higher for high SES (Sobal & Stunkard, 1989; Wang, 2001).

In the United States, obesity researchers suggest that the higher an individual's SES, the lower the prevalence of obesity (Flegal et al., 2016). Conversely, the lower the SES, the higher the obesity prevalence. McLaren (2007) reported a link between obesity and lower education and occupation statuses amongst women in a developed country like the United States. In comparison, there is a positive association between obesity and income observed among individuals in less developed countries.

Researchers show that age-adjusted obesity rates are associated with SES but modified by gender (Flegal et al., 2016; Ogden et al., 2016). Among women, there is a high prevalence of obesity inversely associated with SES, but this relationship does not exist among men. Consistent with this observation, researchers opine that obesity predilection among women is 40.5% and 35.0% in men (Ball & Crawford, 2005; Flegal et al., 2016). Even among women of different racial groups, the effect of SES on obesity varies significantly. The presence of multiple risk factors and variables increases obesity prevalence among AA women (Flegal et al., 2016).

Income is an essential measure of SES, but this relationship between obesity and income varies by race and gender (Ogden et al., 2017). Income is measured using the Poverty Income Ratio (PIR), which compares household income based on family size to the predefined poverty threshold. Based on data from the National Health and Nutrition Examination Survey (NHANES), a family of four who lives $\leq 130\%$ of the poverty threshold is in a low-income class. In comparison, another family of four who lives $\geq 350\%$ of the poverty threshold is in a high-income class (Ogden et al., 2016). Researchers equally observed that 42 % of women who live below 130% of the poverty line are obese. Also, only 29% of women that live with an income of $\geq 350\%$ of the poverty level are obese (Ogden et al., 2010).

The inverse relationship between income and obesity prevalence is only significant among non-Hispanic White women, amongst whom obesity prevalence decreases as income (PIR) falls (Ogden et al., 2010). Besides, only 29% of White women

living at or above the PIR of 350% are obese compared to an obesity prevalence of 42% for White women who live at or below 130% of the PIR (Ogden et al., 2010).

In contrast, with Black men, obesity prevalence increases as income (PIR) increases (Ogden et al., 2010). The authors also noted that among the general population, women who have high-income status are less likely to be obese than those of low-income. Thus, there is a nuance that most women who are overweight are not low-income or that most low-income women are not overweight (Ogden et al., 2010). It is worth noting that when the relationship between income and obesity is examined strictly among AA women, the result showed an inverse trend, but it was statistically non-significant.

Poverty is a perennial risk factor for stress and somatic disease prevalence, including obesity (National Women's Law Center NWLC, 2015). Per NWLC (2015), approximately 17 million women lived in poverty in the reference year. Furthermore, the statistics for the poverty rate are worse for AA women (NWLC, 2015). AA women have a higher poverty rate than non-Hispanic White men, AA men, and non-Hispanic White women. Also, AA women have an adult poverty rate of 23.1% compared to 9.6% of White, non-Hispanic women (NWLC, 2015). AA women experience more poverty than White women (Ogden et al., 2016). As a measure of combined household income, AA female-headed families with children fare even worse. To demonstrate this concept, consider the following example. An AA female-headed household lives in poverty at a rate of 42.5% than 31 % for White female-headed families (Kumanyika, 1987; NWLC, 2015). Poverty associated with low income is a part of low SES that impacts obesity.

The current economic boom in the American economy has not trickled down for many AA families. Hence 1 in 4 AA households with children were food insecure (Coleman-Jensen et al., 2017). Approximately 26% of the Supplemental Nutrition Assistance Program (SNAP) recipients self-identified as AAs (Baum, 2011). Also, some AA women with children who have low-income and limited resources often resort to SNAP benefits to bridge the poverty gap (Baum, 2011). Additionally, the average SNAP beneficiary only received \$216 in food stamps per month. Also, food stamp recipients experience higher obesity prevalence (Baum, 2011).

AA women with low-income experience food insecurity and relegation to low-income neighborhoods rife with food deserts (Bell et al., 2013; Larson et al., 2009). Also, risk factors for obesity, such as the lack of own vehicles, are associated with low-income status (Ver Ploeg et al., 2015) and high transportation costs (Evans et al., 2015). Similarly, stretching out the budget by buying cheaper nonperishable, high fat, and high energy-dense foods per dollar, excluding healthy fruits and vegetables (Darmon & Drewnowski, 2015; DiSantis et al., 2013; Edin et al., 2013). Approximately 61% of US adults had a middle-class annual income of \$42,000 to \$126,000 for a three-person household, compared to 45% of AA households (Statista, 2018).

Also, a review of economic research data suggests that 1 in 5 AA women belong to the middle class earning between \$42,000 and \$150,000 but surprisingly, there is statistically no significant difference between prevalence rates of obesity in low- and higher-income AA women (NWLC, 2015). Income as a part of the SES model does not fully explain obesity prevalence similarity between rich and poor AA women. There is a

need to explore the role of educational status as a factor that potentially explains the linkage between racial and gender psychosocial stress and obesity.

In American society, education is the proverbial key to a higher SES. A PEW researcher indicates that while 36% of non-Hispanic White hold a college degree, only 23% of AA, ages 25 and older, hold a bachelor's degree (Parker et al., 2016). The analysis provided by Parker et al. (2016) of the PEW research shows that the median household income for a White household with a college degree is \$106 600 compared to \$82 300 for a similar college-degree Black family. Thus, the above gap reflects a lingering racial difference in wages across all educational levels (Parker et al., 2016).

Obesity prevalence varies with race and gender attributes (Pan et al., 2009). For non-Hispanic White men, this relationship is not statistically significant since 27% of men with college degrees are obese compared to 32% with less than high school education. For the non-Hispanic White women, 21.8% of women with college degrees are overweight compared to 41.8% with less than High school education (Census Bureau, 2019; Ogden et al., 2010). Among Black men, obesity increases with high levels of education. A review of the census data reveals that 41.2% of men are obese with college degrees than 31.3% with less than High school education (Census Bureau, 2020).

Among AA women, education does not significantly impact obesity; the prevalence of obesity in college-educated AA women and those with less than high school education is high and comparable (Ogden et al., 2017). Therefore, there is little separation between the obesity rate of a group of college-educated AA women and another without high school education. This conclusion is evident from 42.2% of women

with college degrees who are obese compared to 51.1% with less than high school education (Ogden et al., 2010). In the United States, education and income do not largely differentiate between AA women. Higher-income is a risk factor for obesity in developing countries (Ogden et al., 2010).

There is a global paradox tagging obesity as a disease, which tracks prosperity and the affluent. Particularly among developing countries, it suggests that the richer an individual, the more likely they are to be obese (Ball & Crawford, 2005; Hruby & Hu, 2015). In the United States and Organization for Economic Cooperation and Development (OECD) countries, obesity is inversely associated with poverty and education. Thus, individuals with higher education and income status have a lower obesity prevalence (Ogden et al., 2010).

The income-based stratification corroborates the conclusion that a higher incidence of obesity is associated with poverty and lower education (Devaux & Sassi, 2013; Hruby & Hu, 2015; Levine, 2011). This education, income, and obesity relationship holds for non-Hispanic White women and not for AA women in America (Ogden et al., 2010). Also, analysis of research data suggests that academic attainments, higher income levels SES do not significantly lower the prevalence of obesity in AA women (Ogden et al., 2017). Additional research studies are needed to understand why education and income do not buffer obesity in middle-income AA women.

Occupation is another part of the SES that impacts obesity. Occupational risks are hazardous to health and contribute to obesity (Luckhaupt et al., 2014; Pandalai et al., 2013). Several researchers have also drawn the association between exposure to the

hostile work environment and obesity (Pandalai et al., 2013; Solovieva et al., 2013; Zhao, Bogossian, et al., 2012). Researchers examining the work environment and obesity relationship suggest that the hostile work environment is a risk factor for obesity among women working multiple jobs. The risk extends to women working > 40 hours a week and lower-income occupations than high-paying professional jobs (Caban et al., 2005; Ostry et al., 2006). AA women work in a professional environment that impacts the prevalence of obesity due to their experience of psychosocial stressors in job insecurity, unequal pay for equal work, and work-family imbalance to earn a living (Alterman et al., 2013).

Researchers have long postulated an inverse relationship between obesity and socioeconomic position (SEP) among AAs despite inconsistent empirical findings (Ball & Crawford, 2005; Hruby & Hu, 2015; James et al., 2006). The concept is that people are obese because they are indigent, uneducated, and have poor jobs; these factors together determine the socioeconomic standing as low SEP (Eggers et al., 2016). An earlier obesity researcher suggested an association between obesity in AA women and SEP (Kumanyika, 1987).

In a follow-up study to determine if low SEP measured at different stages of a life course affects obesity in adulthood, James et al. (2006) conducted cross-sectional and longitudinal research with 1167 adult Black men and women in North Carolina known as the Pitt County Study. The researchers investigated the early life socioeconomic position measured by parental occupation and childhood deprivation in addition to the adult life

socioeconomic position as measured by vital socioeconomic factors of education, occupation, and employment status of the participants (James et al., 2006).

In their findings, the Pitt County researchers showed no consistent association between SEP and obesity in men, whereas, in women, intricate relationship patterns existed (James et al., 2006). At baseline, the AA women with the lowest SEP had higher levels of obesity measured by BMI. In contrast, at the end of the study and in the 13-year follow-up period, AA women with higher SEP levels were more obese (James et al., 2006). The Pitt results suggest that better SEP does not provide a buffer against obesity in AA women (James et al., 2006).

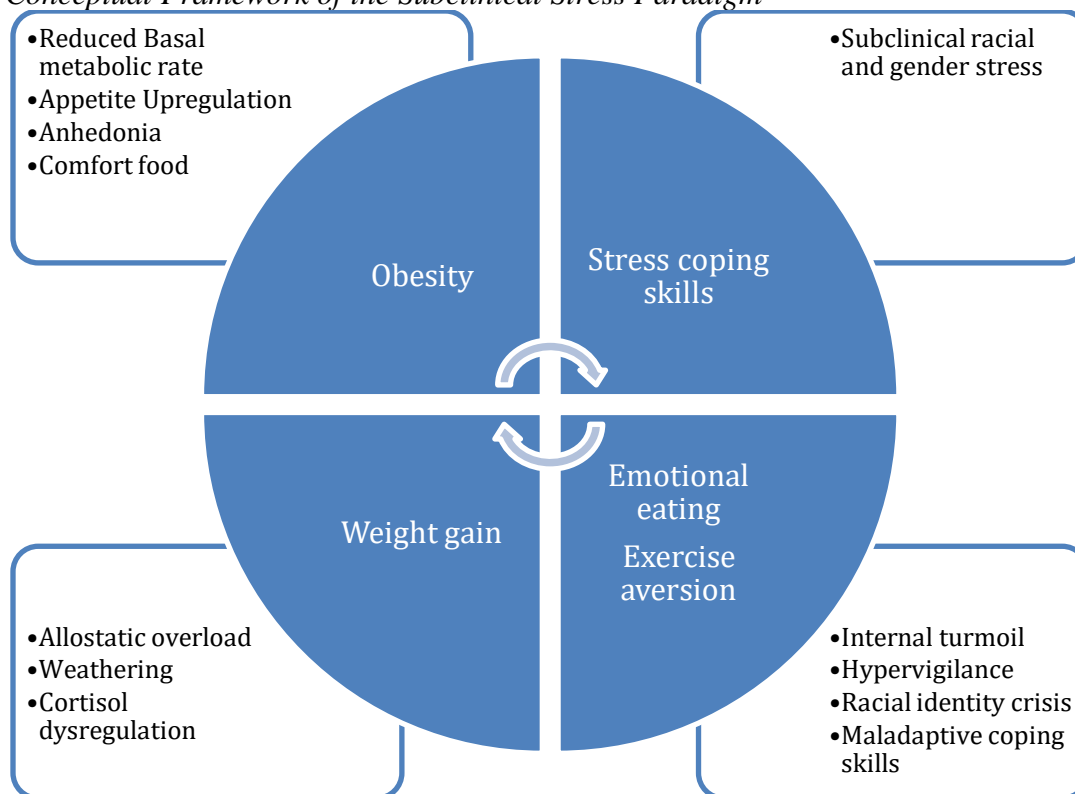
The consistent risk factors and themes among various studies are that higher education, income, and overall SEP do not significantly control obesity prevalence in AA women (Eggers et al., 2016; Ogden et al., 2014; Walker & Gordon, 2014). Perhaps the much-touted SEP does not fully explain obesity in AA women. In that case, further studies are needed to provide new insight into how other variables such as psychosocial subclinical racial minority and gender stress may impact obesity (Bell et al., 2019; Cozier et al., 2014; Woods-Giscombé, & Lobel, 2008).

The Subclinical Stress Paradigm

Stress refers to the body's physiological adaptation to the presence of internal and external stimuli that can potentially disrupt the body's homeostasis by negating its innate compensatory mechanism (Marks, 2016). An individual undergoes stress due to the perception of a real or imagined threat to their overall well-being. Stress can also be clinical when presented with a visible and measurable sign or subclinical, which does not

present with apparent symptoms (Assis et al., 2015). In my study, I refer to racial minority and gender stress as subclinical stress experienced by AA women without a clinical diagnosis of mental health disorders. Besides, subclinical stress can result from internalizing adverse mental and emotional events. Thus, subclinical stress is the internal turmoil hidden from the conscious self, which inflicts psychological damage without necessarily producing visible signs (Assis et al., 2015; Helms et al., 2017).

The significance of subclinical stress is that it represents the cumulative daily stressors, which is more than the absence of psychopathological conditions that affect health behavior and outcomes (Schönfeld et al., 2016). Everyone experiences some subclinical stress in the form of challenging life events. In the case of AA women, it can be the stress of belonging to a minority racial group, which is a positive predictor linked to psychopathologies, including obesity (McClain et al., 2016). Conversely, having social support, self-efficacy, and coping skills are negative predictors that reduce vulnerability to subclinical daily stressors (McClain et al., 2016; Park et al., 2016; Parrish et al., 2011). The subclinical stress conceptual framework I used for this study was that AA women experienced racial minority and gender stress overwhelming their stress coping mechanisms (see Figure 2). Stress impacted health behaviors such as diet and physical activity participation. Allostatic overload, cortisol dysregulation, and weathering are linked to the stress-obesity pathway. The increased consumption of comfort food due to appetite upregulation and physical activity avoidance contributed to the prevalence of obesity.

Figure 2*Conceptual Framework of the Subclinical Stress Paradigm*

Several researchers examined subclinical stress and its impact on numerous chronic diseases besides obesity. To further illustrate this concept, consider the following examples. Assis et al. (2015) explored the link between subclinical stress and pain, fatigue, and myalgia. However, the researchers did not directly address obesity. Similarly, another study focused on the association of subclinical stress with heart disease, diabetes, and increased cancer mortality (Lewis & Neville, 2015). Also, the relationship of subclinical stress to type 2 diabetes mellitus (Joseph & Golden, 2017), the relationship of stress to cardiovascular diseases (Kivimäki & Kawachi, 2015), and the

association between stress and cognitive functions (Scott et al., 2015). Although studies linking subclinical stress and other chronic diseases are instructive, none addressed the stress-obesity linkage.

In contrast, only a sparse number of studies have critically investigated the association between stress and obesity. Namely, the study linking cortisol dysregulation and obesity (van Rossum, 2017), and the relationship between emotional eating, perceived stress, and BMI (Waters et al., 2015). Thus, there is a literature gap because no known studies have examined the attitudes, beliefs, and lived experiences of racial minority and gender stress on obesity in AA women.

AA women's racial and gender identity is mostly viewed negatively and portrayed with uncomplimentary stereotypes in society (Settles et al., 2010). Additionally, AA women consider the experience of being a member of a racial minority group and a woman as a stressful status, which came by birth (Settles et al., 2010). As children, many AA women experienced potentially traumatic household and sociocultural events. The experience of stressful events in childhood correlates with Adverse Childhood Experiences (ACEs), which combined with low socioeconomic deprivation interact as a strong independent predictor of weight gain and obesity risk in adulthood (Gardner et al., 2019; James et al., 2006).

At academic institutions, workplaces, and other social spaces, AA women experience hypervigilance, racial insults and report more episodes of gendered racism and discrimination (Jerald et al., 2017). Compared to women of other racial groups, AA women exhibit reduced stress coping skills linked to emotional eating and obesity

(Berger & Sarnyai, 2014). Besides, AA women are exposed to intentional or unintentional racial minority and gender stress from race-based insults through the "wear and tear on the body (allostatic load pathway). An example is a derogatory behavior of referring to an AA woman as a "Strong Black Woman" based solely on stereotype and prejudice (Jerald et al., 2017).

The focus of the CDC's guidelines on the causes and prevention of obesity is on modifying individual behaviors through diet and exercise (DeLany et al., 2014; Hill et al., 2012). My research on the lived experience of subclinical stress on obesity among AA women examined racial minority and gender stress impacting obesity. Lived experience is the first-hand accounts and impressions of living as an obese AA woman dealing with the impact of subclinical stress on obesity, namely, the everyday stress of being "Black" and a "female," without a diagnosis of mental health disorder (Puhl & Heuer, 2010; Woods-Giscombé, 2010). I aimed to transcend the failed personal choice model by directing the conversation towards upstream factors like racial and gender stress as social determinants of health impacting obesity.

In a research study to investigate the incidence, prevalence, and risk factors for stress in America, the researchers observed that overall, America's stress appears to be trending downward (APA, 2015). However, 75% of Americans report experiencing at least one stress symptom in the past 30 days. In the APA Stress in America survey of 3068 U.S. adults, researchers measured the perceptions of stress and the leading causes of stress. They found a link between psychological and physical health that impacts individual health outcomes (APA, 2015).

Consequently, the study also noted that gaps exist in stress levels between the experience of women, parents, the younger generation, and lower-income individuals compared to the general population (APA, 2015). In this APA survey, 64% of respondents self-reported money/financial stress, 60% work-related stress if employed, 47% identified family responsibilities-related stress, and 46% cited personal health stress as factors that affect their overall well-being (APA, 2015).

Exploring the gender gap in stress prevalence between men and women, researchers conducting the APA Stress in America survey consistently found that women self-reported a higher stress level than men. Researchers in this study also observed that 51% of women than 32% of men reported difficulty sleeping due to daily stress. Another 40% of women compared to 29% of men self-reported general anxiety. Among respondents who reported feeling anxious, 41% of women stated that stress affects their food choices and eating behavior compared to just 24% of men (APA, 2015).

On any given day, people experience several potentially stressful events, but the ability to recognize hostile stress is critical to a better health outcome (Cardel et al., 2018). Besides recognizing potentially harmful stress, next is the reactivity to the daily stressors as potentially negative reactivity predicts self-control depletion and vulnerability to the ominous effects of stress. Accordingly, the higher the level of self-control displayed in response to the daily stressor, the lower the individual's harm (Park et al., 2016).

The vulnerabilities and damage produced by subclinical stress are relative to the type of stress, stress-coping skills, and self-efficacy (Parrish et al., 2011). Different stress

types are classified into epidemiological and psychological tradition-based stressors (Cohen et al., 2016). The epidemiological tradition of stress emphasizes which circumstance and experience of stress, such as financial, work-related, family responsibilities, and personal health stressors, are deemed stressful by consensus (Cohen et al., 2016).

In contrast, the psychological tradition of stress is the everyday wear and tear type of stress that focuses on the contextualized individual experiences and perceptions of the stressful events (Cohen et al., 2016). Furthermore, when the stressful events overwhelm the body's coping resource threshold, the resultant imbalance leads to various kinds of somatic diseases and psychopathologies (Cohen et al., 2016; Parrish et al., 2011; Steptoe et al., 2018).

The lived experience of stress is subjective and deeply personal; it is the representative, perceived, and contextualized experiences of the affected person providing their truth (Harding et al., 2014; McClain et al., 2016; Waters et al., 2015). Psychological stress includes perceived stress, which is the subjective evaluation of stressors, influenced by personal attributes such as gender and race (Chauvet-Gelinier & Bonin, 2017). Perceived psychosocial stress creates an allostatic load burden that impacts the onset of several somatic diseases, including obesity (Cardel et al., 2018; Kozela et al., 2017).

Psychosocial stress is linked to cardiovascular diseases (Chauvet-Gelinier & Bonin, 2017; Kozela et al., 2017). Stress is linked to Type 2 diabetes and everyday "wear and tear on the body" (Hackett et al., 2015; Hackett & Steptoe, 2016; Steptoe et al.,

2014). Stress from a significant life event is also associated with metabolic syndrome (Cardel et al., 2018). Establishing the general concepts of the fundamental pathways linking psychosocial stress and this litany of somatic diseases provides an understanding of the role played by psychosocial determinants in chronic disease. Ultimately, this stress-somatic disease pathway may provide unique insights into the impact of subclinical racial minority and gender stress on obesity in AA women.

Kozela et al. (2017), in the Health, Alcohol and Psychosocial factors In Eastern Europe (HAPIEE) project, examined the association between stress measured by depressive symptoms and cardiovascular disease mortalities in eight different Central and Eastern Europe populations. The authors investigated 28 945 participants ages 45-69 years from Russia, Poland, and Czech towns (Kozela et al., 2017). The depressive symptoms, which occurred during the past week, were measured using the 20-item Center for Epidemiologic Studies Depression (CES-D) scale (Kozela et al., 2017). From the 13,617 men and 15,328 women examined at baseline, there were 2091 deaths in the cohorts from all causes and 850 deaths from cardiovascular disease (CVD). The researchers in this study demonstrated a graded increase in CVD mortality by depressive symptoms in both sexes from all three countries (Kozela et al., 2017).

Although the authors of the Kozela et al. (2017) study were able to show an association between stress (depression) and chronic disease (CVD), the casual relationship and the effect of depression treatment on CVD outcomes remains hotly contested (Russ et al., 2012; Rutledge et al., 2013; Taylor et al., 2009). This ambiguity extends to the causal role of stress and whether mortality is only associated with chronic

stress such as depression or whether any form of relationship exists between subclinical racial minority and gender psychosocial stress and somatic diseases.

Hackett et al. (2015) explored the pathways linking psychosocial stress and type II diabetes by investigating the dynamics of allostatic load (Hackett et al., 2015). The authors examined 140 men and women between 50–75 years old with type 2 diabetes and 280 non-diabetic participants by assessing changes in selected criteria of allostatic load such as total cholesterol, salivary cortisol, blood pressure, and heart rate against changes in stress monitored by 24 hours salivary cortisol levels (Hackett et al., 2015).

Hackett et al. (2015) found that the study group has a higher level of baseline cortisol concentration and heightened cortisol output throughout the day. There was also impaired post-stress response, higher cholesterol concentration, triglycerides, decreased blood volume, higher hemoconcentration, heart rate, and elevated BP compared to the control group. Similarly, the study group self-reported higher financial stress, divorce rate, and hostility, including decreased social cohesion and a sense of control over personal lives. The authors concluded that diabetic patients displayed a higher stress profile, negative symptoms, and more significant depressive symptoms than the healthy control group (Hackett et al., 2015).

Under conditions of a healthy stress response and glycemic control, when a person faces a stressor, the body releases cortisol, which supplies excess glucose and inhibits Insulin (Hackett et al., 2015). Also, cortisol causes vasoconstriction or narrowing of the artery, resulting in increased blood flow and a higher heart rate (Hackett et al., 2015). Hence, this surge in glucose level boost energy and invigorate the muscles to meet

the immediate danger. Besides, for diabetic patients under a constant state of stress, the body is continuously releasing cortisol. Long-term exposure to cortisol produces excess glucose, which is the risk factor for diabetes (Hackett et al., 2015). Repeated exposure to cortisol is not only a risk for diabetes, but the ensuing inflammation affects other chronic diseases such as obesity (Marks, 2016; van Rossum, 2017).

The cortisol – glucose pathway is essential to my study because repeated cortisol increase is associated with weight gain. Cortisol mobilizes triglyceride to visceral fats, causes insulin resistance, dyslipidemia, and sends hunger signals to the brain leading to overeating and weight gain (Hackett et al., 2015). On the contrary, research studies linking allostatic load or cumulative subclinical stress with diabetes have produced inconsistent results (Carlsson et al., 2011; Mattei et al., 2010).

Most critics of the cortisol – glucose pathway argue that the increased subclinical stress measured by allostatic load precedes type 2 diabetes development. Therefore, using "the wear and tear on the body" unfairly brings together an unusual set of arbitrary biomarkers with critical physiological implications that do not fully explain the link between stress and diabetes (Hackett et al., 2015). The existence of ambiguity about the cortisol – glucose pathway for diabetes etiology may also question the stress-obesity relationship. Therefore, there is a need to review more literature on the stress-cortisol-chronic disease or obesity paradigm.

Using the Jackson Heart Study, Cardel et al. (2018) examined the association between perceived psychosocial stressors and metabolic syndrome (MetS) severity in AA adults. In this cross-sectional study, the authors had 3870 AA participants ages 21- 95

years (63% of women and the average mean age of 54). The authors measured psychosocial stress using three different scales: The Global Perceived Stress (GPS), Major Life Events (MLE), and the Weekly Stress Inventory (WSI). GPS scale assessed the perception of the severity of chronic stress experienced in the past 12 months, including racism and discrimination (Cardel et al., 2018). Besides, the MLE scale assessed the self-reported major life events that caused chronic stress in the past 12 months, including illness, job loss, violent crimes, and grief. The WSI survey also measured acute experiences of stress across the past week's life domain, including household chores, job tasks, and finances (Cardel et al., 2018).

Accordingly, in the results, the researchers in this study demonstrated that participants who reported high versus low GPS and MLE had a more severe case of MetS ($p = .0207$ and $p = .0105$, respectively) regardless of lifestyle factors, while WSI was not significantly associated with MetS (Cardel et al., 2018). Additionally, women versus men reported significantly higher values of GPS and MLE ($p < 0.0001$). The inference made by the authors is that the higher the prevalence of self-reported incidence of global or significant life events, the higher the severity of MetS in a sample of AA women from the JHS data (Cardel et al., 2018).

The psychosocial stress-MetS pathway is relevant to this present study because stress affects other somatic diseases such as cardiovascular diseases (Chauvet-Gelinier & Bonin, 2017), Type 2 diabetes (Steptoe et al., 2014), and obesity via central adiposity (Pickett & McCoy, 2018). It is unknown if the same pathway link stress and all somatic diseases, including obesity. What is known is the connection between MetS and obesity

in women (Hackett et al., 2015). The underlying etiology of metabolic syndrome is extra weight, obesity, lack of physical activity, and genetic predisposition. Also, how the body fat is distributed in the body, especially having upper body fat, is crucial to developing insulin resistance (Carson & Lawson, 2018).

The clinical presentations of MetS is an accumulation of several disorders characterized by a women's waist circumference of 35 inches, elevated triglycerides 150 mg/dL or higher, reduced high-density lipoprotein cholesterol less than 50 mg/dL, or an elevated fasting glucose of 100 mg/dL or higher (Cătoi et al., 2018). Long-term exposure to subclinical psychosocial stress and cortisol increases glucose and insulin resistance, linked to MetS and obesity (Hackett et al., 2015).

Accordingly, the stress-MetS relationship is analogous to the research evidence presented for the association between stress and Type II diabetes, stress and cardiovascular diseases, and the severity of chronic diseases (Cardel et al., 2018; Hackett et al., 2015; Kozela et al., 2017). Namely, there is empirical evidence that unresolved stress leaves the body awash with cortisol. Repeated exposure to cortisol causes inflammation, an underlining factor in all the diseases described (Berger & Sarnyai, 2014; van Rossum, 2017). As a result, researchers have also tried to use the stress-cortisol-inflammation pathway to explain stress-obesity linkage (Keith et al., 2017; Pickett & McCoy, 2018; Waters et al., 2015).

Among the researchers investigating the linkage between stress and obesity is Harding et al. (2014), who examined the relationship between perceived psychosocial stress and obesity. In the research dubbed "The Australian Diabetes Obesity and Lifestyle

(AusDiab)" study, the authors conducted a population-based survey of adults 25 years and older (Harding et al., 2014). Starting from the year 2000 to five years later, the authors conducted a prospective study that followed 5,118 participants (2,781 women and 2,377 men) of AusDiab (Harding et al., 2014). Psychosocial stress was assessed by perceived stress measured at baseline using the Perceived Stress Questionnaire (PSQ), a 30-item measure of the perception of stress over the past 12 months (Harding et al., 2014). A second scale used was the life events scale, a self-reported measure of stressful life events in the past 12 months. The researchers used the BMI changes scale to measure weight gain.

The researchers of the "AusDiab" study presented results with an observed mean BMI change of 0.81 (± 1.93) kg/m² among participants who reported high perceived stress consisting of at least three or more stressful life events in the previous year (Harding et al., 2014). Besides, the participants who reported higher stress levels with more significant BMI change were more likely to be women, obese, eating high-calorie foods, and performing less physical activity (Harding et al., 2014). Thus, the study results demonstrated the inextricable linkage between perceived stress and weight gain, leading to further questions if such association exists between racial and gender tension and weight gain.

The research conducted by Harding et al. (2014) has significant implications for my research study because it suggests that the relationship between stress and obesity is positively associated with psychosocial stress, particularly the perceived and life event stress. There is clarity in the link between stress and physical health conditions; what is

unclear is the types of stress that constitute a risk factor for the development and prevalence of obesity in AA women.

Ford et al. (2016) argued that AA women show a unique vulnerability to obesity due to psychosocial stress. Similarly, Gebreab et al. (2012) in the Jackson Heart Study opined that psychosocial stress only serves as a mediating factor in the relationship between income and obesity prevalence but notably that the effect of psychosocial stress on obesity among AA women was not statistically significant. As a result, the authors conceded that their study only measured the generalized form of psychosocial stress and found no vital link to obesity; likely, it did not explore the specific types of stressors most relevant to the development of obesity (Gebreab et al., 2012).

Further examination of the stress-obesity relationship in literature reveals researchers who used the Cardia study to demonstrate the types of stress potentially associated with obesity. One popular hypothesis to support this relationship is that racial/ethnic discrimination is a psychosocial stressor linked to weight gain among AA women (Agyemang & Powell-Wiley, 2013; Cunningham et al., 2013). Researchers have empirical data suggesting that racial discrimination is associated with weight changes but that not all types of stressors cause weight gain (Cozier et al., 2014; Mwendwa et al., 2011). To my knowledge, no studies have explored the lived experiences of AA women to understand how racial minority and gender stress impact obesity.

The psychosocial subclinical stress model literature is as complicated as the etiology of obesity (see Ogden et al., 2016). It is important to understand and focus on the stress-response pathway's pathophysiology and how it impacts obesity, which is the

paradigm that I am examined in my study (see Cozier et al., 2014; Sominisky & Spencer, 2014; van der Valk et al., 2018). Researchers have long suggested that physiological and psychosocial stress are the two main stress categories (Chauvet-Gelinier & Bonin, 2017; Hope et al., 2015).

Physiological stress tends to be physical in nature, absolute and generally interpreted as stressful by everyone exposed to it. Psychosocial stressors are different from the former because they are subjective and constitute the perceived experiences of only those who experienced them and are harmed by the experiences (Chauvet-Gelinier & Bonin, 2017; Hope et al., 2015). Psychosocial stress is an example of subclinical everyday stress. Psychosocial stress is the cumulative daily stress that results from an individual's experiences of psychological and emotional distress (Hemmingsson, 2014).

In my study, the subclinical stress model is the stress response pathway of the body's natural response to factors such as fear, anxiety, and powerlessness. Additional factors are anger, insults, invalidation, negative stereotyping, negative emotions, race-related vigilance, and heightened sensitivity. These factors result from racial and gender stressors, potentially overwhelming the body's homeostasis (Brenchley & Quinn, 2016; Keith et al., 2017; Marks, 2016; Waters et al., 2015).

Consequently, as stressors cross a manageable threshold without the body's ability to bring it under control, homeostasis is compromised. The imbalance triggers a cascade of events, including the activation of the hypothalamic-pituitary-adrenal (HPA) axis, secretion of cortisol hormone, and lipoprotein lipase enzyme (Agyemang & Powell-Wiley, 2013). An increase in cortisol and lipoprotein lipase or decreased adiponectin

causes stress overload. Cortisol regulation and lipoprotein lipase are linked to poor stress coping capacity, appetite up-regulation, and emotional eating (Agyemang & Powell-Wiley, 2013). Additional effects are central adiposity, high-calorie intake, high fat, energy-dense foods, and obesity (Bidulescu et al., 2013; Wardle et al., 2011; Yamada et al., 2011).

Integrative researchers in current studies have linked subclinical stress through the brain-body pathway to physical health and disease state, especially obesity (Cohen et al., 2016; Gianaros & Wager, 2015). Subclinical stress leads to weight gain and obesity through neuroendocrine dysfunction and inflammatory pathways (Pickett & McCoy, 2018). The stress-response pathway fluctuations impact food choices, decrease food prep time, and increase preferences for high calorie, high-fat foods (van Rossum, 2017).

Subclinical stress also affects obesity through changes in health behaviors such as leisure-time physical activity aversion (Hemmingsson, 2014). Public health scientists used the brain-body pathway to explain aspects of obesity etiology (Goosby & Heidbrink, 2013; Ifatunji & Harnois, 2016; Marks, 2016; Steptoe et al., 2018). Nonetheless, how the experience of subclinical racial minority and gender stress impacts obesity remains unknown. Thus, the impact of the lived experiences of racial and gender stress on obese AA women is yet to be fully understood. Given the potential association between subclinical stress and obesity, there is a public health imperative to examine the role of subclinical racial minority and gender stress in obesity prevalence among AA women.

Racial Minority Stress

Examining the impact of racial minority stress on obesity offers insight into the potential link beyond the demographic and behavioral risk factors typically associated with obesity (see Meyer, 2003; Soriano, 2013). My study's novelty investigates the potential subclinical stress-obesity pathway to gain insight into the impact of perceived racial stress on obesity based on AA women's lived experience (see Helms et al., 2017). Racial minority stress describes the persistent state of stress people face due to their membership in a minority racial/ethnic group, with the stress perpetuated by interpersonal prejudice and discrimination (McClain et al., 2016).

Racism creates polarization between the dominant race /culture and other minority groups. The friction results in the experience of perceived discrimination, stressful acculturation, and meta stereotypes. Similarly, racism comes with negative media images, race-related vigilance, and rejection sensitivity (Chauvet-Gelinier & Bonin, 2017). Racism, as subclinical stress, appears in many forms. Still, they all are a microcosm of the internal turmoil and pain experienced by the minority population with the potential to impact health outcomes (McClain et al., 2016). The lived experience of AA women with racism is particularly important to offer insights into how the contextual accounts of discrimination may be a risk factor for stress-linked obesity.

Researchers hypothesized that AA women's life course exposure to race-related stress experiences might explain the poor health outcomes and health inequities among this target population (James et al., 2006; Lewis et al., 2015). In many spirited discussions about the role of racism on health outcomes, critics counter and likened

racism complaints by AAs to "playing the race card" (Schraub, 2016). Perceived discrimination alone is a stressor associated with adverse health behavior and outcomes in AA women (Sims et al., 2016). For AAs not born during slavery, mother-to-child transfer of stress suggests that maternal adverse childhood experiences (ACEs) of racism can impact AA children's generations. The maternal-fetal stress transmission exists even for children who did not personally live through the period of racial segregation (Goosby & Heidbrink, 2013; Jones et al., 2019; Monk et al., 2012).

The psychopathological vulnerabilities of prejudice-related minority stress linger beyond those of non-prejudiced stressors (Frost et al., 2015). Consequently, AA women are more likely to pass on post-traumatic stress resulting from racial prejudice to their children than women of other racial groups (Frost et al., 2015). A similar transfer of race-related community trauma happened to Japanese Americans who experienced internment-related stress (Nagata & Cheng, 2003). Researchers in various studies show that perceived racial prejudice and discrimination have a lingering effect linked to obesity outcomes in AA women (Marks, 2016; Waters et al., 2015). Additionally, self-reported racial discrimination experiences are related to increased waist circumference and BMI among AA women (Cozier et al., 2009; Cozier et al., 2014; Goosby & Heidbrink, 2013).

Cunningham et al. (2013), in the prospective analysis of the Coronary Artery Risk and Development in Young Adults (CARDIA) study, examined the changes in waist circumference and body mass index in the U.S. CARDIA cohort. The authors tested 5115 research participants (including 1491 Black women, 1153 Black men, and 2471 White/other races) from AL, IL, MN, and CA (Cunningham et al., 2013). The authors set

out to examine whether self-reported racial discrimination experiences could predict an increase in waist circumference. Follow-up studies were completed in 15 years (Cunningham et al., 2013).

Per Cunningham et al. (2013), trained observers measured the waist circumference and BMI with the BMI calculated explicitly by the formula weight (kilograms) divided by height squared (meters). The researcher also used a 9-item Experiences of Discrimination index, which measured the self-reported racial/ethnic discrimination experiences. Similarly, the researcher used the Experience of Discrimination to evaluate whether participants have "ever experienced discrimination, made to feel inferior, or prevented from doing something in any location and situation because of their race or color." (Cunningham et al., 2013).

The researchers in Cunningham et al. (2013) showed that AA men and women reported racial discrimination experiences at rates twice those of White women and men. After controlling for covariates, AA men and women had an increase of 1.09 in waist circumference and 0.67 increase in BMI over time associated with the self-reported experiences of racial discrimination (Cunningham et al., 2013). As hypothesized, the authors concluded that increased self-reported racial discrimination experiences are associated with an incremental increase in BMI in AA women. No such link exists among AA men or White men and women (Cunningham et al., 2013). This finding was relevant to my study because empirical evidence showing racial discrimination stress is positively associated with waist circumference, BMI, and obesity-related outcomes.

In another study, researchers used a sample of 12,214 AAs based on eight years of BRFSS reactions to the race module. The researchers examined the association between race-related vigilance and obesity in AA (Powell et al., 2016). The authors used the frequency with which the participants thought about their race as a measure of race-related vigilance and obesity as BMI of ≥ 30 kg/m² from self-reported height and weight (Powell et al., 2016). The authors presented results where 61% thought about their race from less to more than daily. In contrast, for those who reported never thinking about their race, the adjusted odds of obesity were 1.37, 95% CI: 1.07-1.76 if the frequency was more than daily (Powell et al., 2016). The authors concluded that frequently thinking about one's race was a risk factor for obesity in AAs in general but worse among AA women.

I highlighted the importance of race-related hypervigilance to this current study because, as AAs deals with racial/ethnic discrimination, they are confronted with the "otherness factor," having to ready themselves to be misjudged, misunderstood, and consistently denigrated based on the color of their skin. Similarly, the projection of "otherness" is described by researchers as the "imposter phenomenon." This phenomenon may affect AAs' self-esteem, education, and employment as a risk factor for racial minority stress (Bernard et al., 2017; Graham & McClain, 2019; Lige et al., 2017).

As a result, researchers claim that the lived experience is an internalized turmoil of racism, like an albatross around AA's women's neck. They were born with two strikes against them for being Black and a female. The association between race-related

hypervigilance and obesity may appear to follow abnormal stress response-obesity pathways (Powell et al., 2016).

Hicken et al. (2017) opined that AAs bear the weight of racism, are judged as a group, and are labeled harshly with the worst stereotype of their race/ethnic groups. White Americans retain their identity, and society views them individually. The authors noted that racial minority stigma compels Blacks to adopt hypervigilance as a defense mechanism (Lee & Hicken, 2016). Similarly, for many Blacks living in a racialized American society, they find themselves having to psychologically prepare daily before leaving their homes to guard against racial prejudice and discrimination (Lee & Hicken, 2016).

Furthermore, Blacks must be cautiously mindful of their appearance and language and avoid social spaces where White Americans perceive them as a threat. Blacks also experience White people calling the police on them for doing mundane things other law-abiding Americans do daily without repercussions (Lee & Hicken, 2016). Also, due to America's racial past, Blacks are hypervigilant. Still, they do so today because they must watch their backs for a myriad of real or imagined fears due to systemic, everyday prejudice and discrimination akin to "death by a thousand cuts" (Lee & Hicken, 2016). Hypervigilance is a defense mechanism that is only marginally protective but often inadvertently becomes a risk factor for cumulative subclinical stress linked to the abnormal stress response-obesity pathway (Hicken et al., 2017; Powell et al., 2016).

One school of thought engaged with understanding the inextricable linkage between racial or gender stress on obesity has done so by evaluating AA women's lived

experiences (Powell et al., 2016). AA women have historically experienced powerlessness in the face of social and institutional discrimination. The unsavory experience is contributory and consequential to life course exposure to meta stereotypes and racial insults (Powell et al., 2016). Since meta stereotypes and microaggression are race-related stressors, their association with obesity among AA may provide potential insights into the lived experience of racial minority and gender stress.

In meta stereotypes, an AA woman is judged based on real or imagined group attributes, not on personal qualities or the individual's lack of them (Powell et al., 2016). To expand on this concept, consider the following example. Society ascribes an AA woman with masculine characteristics (when she excels in sports), called big, strong, and independent (when she blazes her trail), and called loud and threatening (when she is assertive and shows leadership). Forcing many AA women to blend in or be counted out (see Woods-Giscombé & Black, 2010).

In contrast, White women are wrapped with femininity using endearing terms, portraying fragility, and presenting her as a damsel in distress that deserves the acceptance, love, and protection of a man and society (Woods-Giscombé & Black, 2010). Besides, meta stereotypes served their purpose for slave owners who needed AA women to be healthy and obedient servants to work the fields or breastfeed their owner's children. However, today, the use of meta stereotypes may contribute to the lived experience of racial minority and gender stress (Woods-Giscombé & Black, 2010).

Additionally, meta stereotypes were also instruments of discrimination during slavery when racism was direct, blatant, and aggressive (Powell et al., 2016). AA women

adapted to meta stereotypes stressors by learning to endure pain and humiliation without complaining and not cracking under pressure as a symbol of silent resistance (Woods-Giscombé, & Black, 2010). Still, the life-course experiences of blatant racism meted through meta stereotypes play out today in social spaces where AA women have the right to be; is perhaps a source of internalized stressors associated with obesity-related health outcomes.

Jerald et al. (2017) explored the physical and mental health impact of the synergy of racial and gender stereotypes on AA women. The authors examined 609 Black women using a structural equation model and measured meta stereotype awareness, which is the consciousness of others' harmful views about their racial/ethnic group. Furthermore, the authors presented results where that meta-stereotype mindfulness predicted negative mental health outcomes, including anxiety and depression, which was predictive of poor self-care (Jerald et al., 2017).

Similarly, negative media images of AA women and microaggression are vestiges of a racist and discriminatory past (Waters et al., 2015). Furthermore, in many media portrayals, AA women are stereotyped as loud, lazy, and fat; they have a high fecundity rate and always single mothers (Waters et al., 2015). AA women live in a race-conscious society constantly inundated by the media portrayal of negative stereotypes and in recent years with social media posts and tweets.

Consequently, AA women resign to involuntary adherence and conformity to the normative belief of respectability politics in their daily lives and social media to gain acceptance and upward mobility (Pitcan et al., 2018). Additionally, negative stereotypes

are communicated to AA women through interpersonal communications that constitute microaggression (Holder et al., 2015). AA women experience these subtle, everyday verbal and non-verbal behaviors that constitute microaggression because of the negative stereotypes against their race and gender (Lewis et al., 2016).

Keith et al. (2017) investigated the effect of darker skin tone and everyday racism experiences on phenotype among AA women. The author's defined everyday experiences of racism as microaggression occurring during the interpersonal form of regular communication. The authors interviewed 6,082 adult participants with 3 570 AA, 891 non-Hispanic White, and 1,621 Blacks of Caribbean descent (Keith et al., 2017). Microaggression was measured by the Everyday Discrimination Scale (EDS), which assessed attributes such as whether people are treated disrespectfully, perceived as not being smart, dishonest, and followed in a store, harassed, and feared (Keith et al., 2017). The authors used the self-rated comparison to measure skin tone and BMI by self-reported height and weight calculated using the formula $BMI = 703 \times \text{weight (lb.)} / [\text{height (in)}]^2$ (Keith et al., 2017).

The researchers in Keith et al. (2017) study showed that 33% of the participants reported low levels of discrimination categorized as low levels of disrespect, condescension, character-based discrimination, and hostility, whereas 25% reported high levels of disrespect, disdain, hostility, and character-based discrimination (Keith et al., 2017). Respondents with darker skin ranked in the high discrimination category. BMI was significantly associated with obesity in AA men and not in AA women. The association is consistent with existing research data showing that Black men report more

discrimination experiences than AA women because AA men are the primary targets of anti-Black discrimination (Ifatunji & Harnois, 2016; Keith et al., 2017).

Microaggression is everyday interpersonal surreptitious communication of hostile, derogatory microinsults and assaults towards racial/ethnic minorities (Holder et al., 2015). Also, racial microaggression is a contemporary but subtle form of racism that directs hatred and brutality towards Blacks (Keith et al., 2017). Microaggression invalidates and diminishes Blacks' personhood and creates hypervigilance and rejection sensitivity (Brenchley & Quinn, 2016). Many researchers agree that the expression of blatant or overt racism is a stressor that serves as an endless source of discrimination linked to stress, cortisol dysregulation, and obesity (Goosby & Heidbrink, 2013; Ifatunji & Harnois, 2016; Keith et al., 2017; Marks, 2016). Further, the work of Cunningham et al. (2013) is consistent with other published studies that observed an association between racial minority stress and obesity-related outcomes, measured by increased weight gain, waist circumference, and BMI (Cozier et al., 2009, 2014; Lewis et al., 2015).

In contrast, many distinguished researchers did not see a link in their studies between racism and obesity in AA women (Hickson et al., 2012; Ifatunji & Harnois, 2016). The overarching paradigm central to the racial minority-stress pathways is the researcher's observation that racial discrimination experiences create a toxic stress environment that impacts obesity-related health outcomes through several recognized channels (Cozier et al., 2014; Waters et al., 2015). The stress response-obesity pathways include cognitive, psychosocial, and cortisol dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis. Additional elements are pathophysiological, impaired healthy

behaviors such as sleep and exercise, and increased emotional eating as a stress-coping mechanism (Goosby & Heidbrink, 2013; Marks, 2016; van Rossum, 2017). In the presence of racial stress and the potential for abnormal stress responses, it is important to know the role of gender in stress etiology and protective stress coping strategies.

Gender Stress

Gender and race are the most permanent, recognizable, and distinguishing demographic variables in stress-related obesity studies. Still, very little consideration is given to the importance of the intersectionality of racial-gender factors influencing social status, culture, stress, weight management, and AA women's lived experience (Himmelstein et al., 2017; Woods-Giscombé & Lobel, 2008). In the 2017 American Community Survey (ACS) demographic data, the United States has 159.41 million men than 165.92 women (Census Bureau, 2019).

Furthermore, women make up 50.8% of the American population, while men account for a slightly lower value of 49.2% (Census Bureau, 2019). Although the ratio of U.S. male to female is statistically equal, there are more women than men; still, men hold more power, rights, and privileges than women. The overrepresentation of men and the power they wield in the socio-economic, political, and cultural domains may feed the lived experience of gender-based stress.

Women are a transactional minority in many social environments where interpersonal interactions occur in the natural setting where people live, work, and play (see Lewis & Neville, 2015). Men have traditionally occupied positions of power, controlled more economic resources, and women played mostly specialized gender-based

roles in families and are assigned emotionally damaging lower social status (Lewis & Neville, 2015). Female professionals earn less than men for an equal amount of work; they are more likely to have their competence diminished professionally. On personal levels, they are stereotyped into gender-typed expectations that may be a source of stress and low self-esteem (Lewis & Neville, 2015).

APA (2015) suggests that stress impacts men and women differently. The APA noted that the female gender plays a significant role in women's stress and coping capacity. In a research study in which men and women received exposure to a perceived stress condition (an industrial accident short film) or a calming effect (beautiful destination travelogue film), women exposed to the industrial accident film were more likely to report stress (Langer et al., 2018). Women who reported stress consumed more food than men who watched the same documentary and women who saw the control film (Langer et al., 2018). Per Langer et al. (2018), women express more negative effects than men when exposed to an equal amount of severe stress. Essentially, stress does not affect everyone or both genders equally.

Stress affects all Americans and impacts the physical, mental, and emotional health outcomes (APA, 2015). Approximately 75% of Americans experience one kind of stress or another that most people readily identify as normal life challenges. Typically, the general population's pressure is mainly stress-related to financial difficulties (APA, 2015).

In contrast, AA women suffer the most significant disadvantage among all American racial groups due to the status of being "female" and "Black." (Lewis et al.,

2016). The linkage between the combined effect of gender and race/ethnic interaction is termed intersectionality (Himmelstein et al., 2017; Lewis & Neville, 2015). What makes the stress that AA women experience different from that of the general population is that it involves prejudice against them for being a minority. The negative impact lasts longer than any other stress (Frost et al., 2015). AA women experience racism and sexism that impacts SES, behavioral, and health outcome indicators, including obesity (Richardson & Brown, 2016).

Differences in obesity prevalence exist between AA men and women that are not explained by race. Other factors may explain obesity prevalence, such as gender differences, child-bearing, and postpartum cultural practices (Holland et al., 2015). The age-adjusted prevalence rates of obesity differ by gender among adults in the United States: Male 35% and female 40% percent (Census Bureau, 2019; Flegal et al., 2016). A review of the ACS Census data shows that the most significant difference by gender with obesity prevalence is among Black adults (Census Bureau, 2021).

The incidence of obesity among AA women is 20% higher than AA men (Ogden et al., 2017). Childbearing and postpartum behavior is an aspect of gender and culture that impacts weight gain. Also, unlike AA men or women of other racial/ethnic groups, AA women are susceptible to unnecessary pre-and post-pregnancy weight retention (Herring et al., 2012). Studies show that AA women put on less gestational weight than White women, but more than 40% of AA women develop excessive gestational weight gain due to cultural, psychosocial, and environmental influences (Herring et al., 2012; Holland et al., 2015).

Transgenerational health beliefs among AA women passed down from the family matriarch and community members reinforce the misconception that excessive gestational weight gain is necessary for fetal health and well-being (Headen et al., 2012; Mathieu et al., 2012). Racial and gender interaction of being "Black" and "female" is deterministic in the incidence of somatic diseases such as hypertension and obesity (Holland et al., 2015). In one study, Holland et al. (2015) investigated excessive gestational weight gain (GWG) as a risk factor for mothers' health outcomes 18 years later in a sample of 467 urban Black women.

The authors opined that GWG is the difference between self-reported pre-pregnancy weight and measured weight at delivery (Holland et al., 2015). The authors also measured hypertension by blood pressure, while obesity is a function of the participant's height and weight 18 months status post first delivery (Holland et al., 2015). The authors presented results where higher GWG was associated with obesity, and the women have a pre-pregnancy BMI value of $< 25.9 \text{ kg/m}^2$ ($P < .05$).

Therefore, Holland et al. (2015) reported an association between GWG and long-term postpartum weight gain, even in normal-underweight AA women (Holland et al., 2015). The relationship between GWG in AA women and obesity offers a gender lens to examine how and why GWG causes obesity. Additionally, it may also help to understand if the stress of navigating the pre-and post-pregnancy period is unique to the intersectionality of AA women and their culture-related gender roles.

Family dynamics as an element of culture impact gender roles and contribute to obesity in AA women (National Kids Count, 2019). The single-parent household

phenomenon is an example of a recent cultural shift prevalent in AA household structure compared to White families (National Kids Count, 2019). Also, more AA women are the head of their houses compared to women of other races. Consequently, the average AA woman who is unmarried and has no live-in boyfriend or partner to share household responsibilities is exposed to daily cumulative stress while working multiple jobs to make ends meet (National Kids Count, 2019).

The additional physical and financial burden of single parenting may come from having full custody of the children issued by the court system (National Kids Count, 2019). In the courts' reasoning, women and mothers are the natural nurturers of children and are therefore seen as the de facto persons to take care of children. Thus, after winning child custody battles, the women raise the kids as single parents. The estranged male partner pays child support, a mere financial obligation, which often happens in many acrimonious divorce cases (see National Kids Count, 2019).

AA women also find themselves raising children alone by default. Many Black males neglect their parental duties of hands-on involvement in child-rearing, especially after separation from the child's mother. Besides, single mothers raise as many as 67% of today's Black children (National Kids Count, 2019). A review of research data shows that AA single mothers who carry the burden of providing the physical, emotional, and financial needs of the children may experience race and gender-related stress that may impact the prevalence of obesity (see López et al., 2014).

Haircare is central to Black women's cultural practices, but maintaining Black women's hair takes time and money, two luxury resources that elude many AA women

(see Hall et al., 2013). Cultural anthropologists suggest that AA women than other races have naturally curly hair, which needs to be dressed more frequently at a higher price at a hair salon (Hall et al., 2013). The prohibitive cost of hair care places an undue burden on AA women who earn less money than other races. Although the hair cost seems mundane, it is significant because it is an additional everyday subclinical stress affecting AA women (see Hall et al., 2013).

Recent data released by the CDC about American Income, earnings, and poverty rates, suggest that AA women earn unequal pay for equal work done across the United States (Gould et al., 2017). AA women only earned \$0.61 per \$1.00 made by a White male compared to \$0.70 by AA men and \$0.78 by White women, respectively (Census Bureau, 2021; Gould et al., 2017). The researchers in the Gould et al. (2017) study seem to suggest that it is the racial and gender attributes of being "Black" and a "female" that place AA women at the totem pole of wage earners, which may potentially be a risk factor for everyday stress.

In addition to cost, the physiology of Black hair, curly nature, and the effort it takes to redo it are aspects of haircare practices that impact AA women's physical exercise participation (Hall et al., 2013). Excessive sweating or hyperhidrosis is associated with stress and obesity (Swartling, 2016). Consequently, AA women do not want to exercise when they know doing so will cause them to sweat and ruin the hair that took so long and cost so much to fix (see Swartling, 2016). To demonstrate this concept, consider the following example. Approximately 40% of Black women avoided physical

exercise due to excessive scalp sweating, which harms Black hair and requires another hairstyling (Hall et al., 2013).

Furthermore, a recent qualitative focus group study of 23 Black women found that AA women did not engage in physical exercise because of excessive scalp perspiration or hyperhidrosis (Joseph et al., 2018). Another factor that deters AA women from engaging in physical activity is the length of time to process Black hair and the cost (Joseph et al., 2018). AA women who perceive hair as a barrier to leisure-time physical exercise are three times less likely to perform the 150 minutes /week of moderate-intensity physical activity deemed necessary for a healthy weight (Hall et al., 2013; Tuso, 2015).

When addressing the health, wellness, and obesity prevalence among AA women, everything is about race and gender, even the appearance of the hair and hair care practices (Pitcan et al., 2018). AA women have a complex history dealing with issues concerning the hair because the notion of "bad hair" versus "good hair" has been linked to the legacy of slavery and meta stereotypes (Robinson, 2011). The "kinky" nature of a Black women's hair and the negative stereotypes attached to Black hairstyles in a racialized society places her at the bottom rung of the American beauty standard ladder (Robinson, 2011).

Researchers who examined the impostor phenomenon suggested that AA women face stigmas about their appearance that forces them to change their appearance to conform to the normative standard of the dominant culture, which is to wear their hair stretched out and straight like that of White women (Greenwald et al., 2009; Pitcan et al., 2018). A failure to conform to the good hair and bad hair pressure elicits societal stigma,

with the Black woman wearing her natural hair berated for having "nappy" curly hair (MacFarlane et al., 2017; Woolford et al., 2016).

Implicit bias in healthcare settings correlates to the general populations' prevalence. Biases based on race, anti-fat, appearance, and SES affects hospitalization rate and quality of care for AA women (FitzGerald & Hurst, 2017), creates pro-White bias, and impact patient-provider relationship experiences for AA women (Hall et al., 2015). The power of the implicit and explicit bias meted to AA women about her hair affects her self-esteem, invites stigma about her style choices, and may impact physical activity participation and obesity (Rudman & McLean, 2016; Woolford et al., 2016). Ultimately, even the seemingly mundane hairstyle practices of AA women hinge on the intersectionality of race-gender interaction that may become a source of subclinical stress, a significant risk factor for physical activity avoidance and obesity.

Theoretical Foundation

The SEM and the MST are the theoretical frameworks for this study. I applied the SEM model to explore racial minority, and gender stress's lived experience as significant factors impacting obesity among AA women. The SEM origin underscores the seminal works of Urie Bronfenbrenner's ecological framework (Bronfenbrenner, 1979). This theory states that human development is related to the entire eco-system where people live, where the individual is nested in and affected by the multilevel ecological environment (Bronfenbrenner, 1979).

Bronfenbrenner's model further explains the effect of the immediate physical, social, and political context relative to health outcomes. The model also displays the

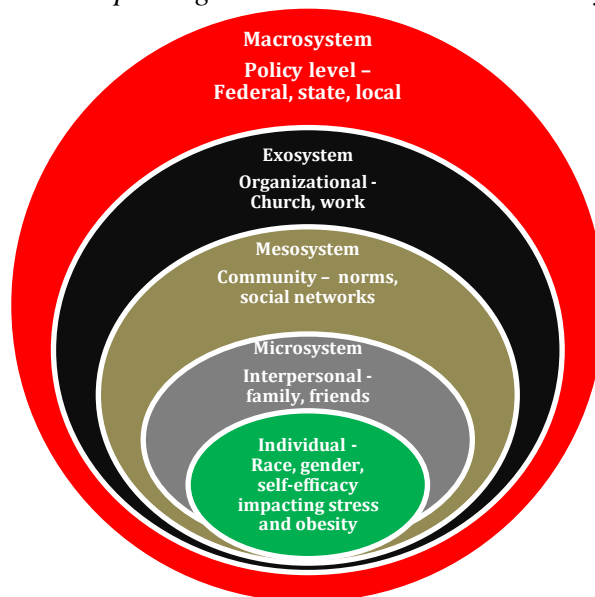
connection between individuals and their natural environment. Bronfenbrenner envisioned the relationship between an individual, the immediate surroundings (microsystem), and the larger culture as a whole (macrosystem) as a nested spectrum (see Bronfenbrenner, 1979; Tehrani et al., 2016). Bronfenbrenner's nested systems correspond to the SEM framework's five nested hierarchical levels: the individual, interpersonal, community, organizational, and policy/enabling environment (Glanz & Bishop, 2010).

I used these five levels to examine the relationship between AA women, the communities, and society (see Figure 3). At the individual level, gender, race, and self-efficacy of the AA may determine the stress impacting obesity (see Glanz & Bishop, 2010; Stokols, 1992). Second, relationships with family, friends, and peer interaction affect AA women's identity at the interpersonal level. Support systems may determine the type of stress and how it impacts obesity (see Glanz & Bishop, 2010; Stokols, 1992).

Next, at the organizational level, establishments in AA communities or others that touch their lives, like the church, may contribute to stress impacting obesity (see Glanz & Bishop, 2010; Stokols, 1992). Also, at the community level, it is the societal norms, social networks, or the lack of it that may lead to stress impacting obesity (see Glanz & Bishop, 2010; Stokols, 1992). Likewise, at the policy level, AA women deal with the enabling environment facilitated by institutions of federal, state, and local governments that can perpetuate or limit the incidence of racial and gender stress, which may impact obesity (see Glanz & Bishop, 2010; Stokols, 1992).

Figure 3

The Five Levels of SEM Impacting Subclinical Stress and Obesity



Note. SEM sphere of influence impacts subclinical stress and obesity.

These nested systems/levels provided the socio-ecological lens to examine the interactions between individuals and health phenomena like the impact of subclinical racial minority and gender stress on obesity (see Glanz & Bishop, 2010; Johnson et al., 2019; Stokols, 1992; Thomas et al., 2019). I applied the SEM model to explore intrapersonal, socio-cultural, and environmental factors in developing subclinical stress, especially how it impacts obesity. The SEM framework provided a unique opportunity in my study to examine the intersectionality of the racial minority and gender stress impacting obesity in AA women (see McLeroy et al., 1988; Puhl & Heuer, 2010).

Meyer (2003) proposed that the MST chronicle the high degree of stress faced by minorities stigmatized because of race, sex, or gender. There are two hypotheses of MST:

The first one is the social selection hypothesis that links health to an inherent gene defect in a minority group (Dohrenwend, 1966). The second hypothesis is the social causation hypothesis, which proposes that minority groups experience difficult situations such as poor social determinants of health and, more seriously, interpersonal prejudice and discrimination that over time leads to psychosocial stress and poor health outcomes (Dohrenwend, 2000; Hoffmann et al., 2019; Meyer, 2003).

Researchers' consensus is that one race is not genetically superior to another (Garrod, 2006; Meyer, 2003; Williams, 1994). Specifically, judging one race to be superior and another to be inferior is similar to genetic racism and White supremacy. Importantly, that being Black is not a genetic defect (Goodman, 2000). Thus, in this study, I chose the social selection hypothesis. This hypothesis is based on the concept that social situations of race and gender are potential stress sources. Besides, different types of environmental systems influence human development, and those interactions between individuals and the larger community shape health outcomes (see Dohrenwend, 2000; Hoffmann et al., 2019; Meyer, 2003; Mossakowski, 2014).

Furthermore, I adopted the hypothesis of social causation for this study because, in a seminal study, Dohrenwend (2000) suggested that difficult and stressful social situations like prejudice and discrimination affect minority health. Meyer (2003) suggested that MST has three critical constructs, namely, minorities experience rejection, prejudice, and discrimination, which is distal stress. Secondly, minorities experience anxiety due to bias, display hypervigilance, and hide their shame and negative feelings about their minority identity, classified as proximal stress. Lastly, minority groups

experience a combination of distal and proximal stress that impacts their health (Meyer, 2003).

All three constructs of the MST loop into the different levels of the SEM. The proximal stress highlights exposure to prejudice, anxiety, fear, and shame, depicting the SEM's intrapersonal level of influence. These stress forms may exert physical and psychosocial pressure on a marginalized group like AA women (see Glanz & Bishop, 2010; Meyer, 2003). The distal level of rejection, prejudice, and discrimination corresponds to the SEM interpersonal level. Potentially, the bond between AA women and others around them, such as family, friends, co-workers, and neighbors, are sources of subclinical psychosocial stress (see Glanz & Bishop, 2010; Meyer, 2003; Thomas et al., 2019).

Minority stress is a form of social stress that explains AA women's exposure to environments they perceived as prejudiced or discriminatory, resulting in an overactive physiological stress response (Dohrenwend, 2000; Gibbons et al., 2014; Meyer, 2007). Ilfeld (1977) posited that social stress significantly impacts individuals based on their relationship with others and their environment. Thus, the lived experience of AA women in my study embodied the totality of who they are, their attitudes, and beliefs.

Furthermore, the lived experience of repeated activation of the stress-response pathway in the face of perpetual racial insults, microinvalidation, and fear is a potential risk factor for stress. Living daily with uncontrolled stress withers the body through a "wear and tear" inflammatory process linked to obesity (Balsam et al., 2011; Geronimus, 2001; McEwen, 1998). Additionally, the gender-ethnic idealism and expectations of the

AA women to be "big and strong" leads to internalized turmoil, stress, and adverse health outcomes such as obesity (Holder et al., 2015; Waters et al., 2015).

Beauboeuf-Lafontant (2003) explored the intersection of gender, race, and stress and noted that these factors played a role in the historical context of the physical, emotional, and psychosocial burden of being a Black woman in race-conscious American society. In the SEM framework, the role of social policy, organizational rules, and societal norms are the enabling environment, which may have caused physical and psychosocial stress to AA women in the past with vestiges present today (Gibbons et al., 2014; Patton, 2015). There have been attempts by researchers to draw the link between the health burden caused by chronic stress and the disparity in health outcomes among Blacks compared to Whites, and the results show poorer health outcome for Blacks due to the physiological effects of acute and chronic stress (Cardel et al., 2018; Geronimus et al., 2006; Kozela et al., 2017).

In my study, I conceptually explored how repeated exposure to everyday subclinical stress may impact obesity leading to high morbidity and mortality outcomes. (see Geronimus et al., 2010). The concepts of the Allostatic load theory and the Weathering theory provided an opportunity to explore the impact of subclinical racial minority and gender stress on obesity. McEwen (1998) conceptualized allostatic load as a function of the body's physiological response to stress expressed through the primary mediators such as cortisol, epinephrine, and norepinephrine hormones. Allostatic load is also a secondary mediator response to stress due to elevated waist-to-hip ratio, cholesterol levels, and blood pressure (McEwen, 1998).

Researchers in several studies have provided empirical evidence, which demonstrated that the impact of allostatic load on AA women leads to cumulative wear and tear on the body while adapting to various stressors (Juster et al., 2010; Pickett & McCoy, 2018). Some of the adaptations may include the ineffective use of emotional eating as a compensatory mechanism to deal with the turmoil of stress beyond the threshold of what the body can control (Pickett & McCoy, 2018).

Consequently, the allostatic load hypothesis that I used in this study provided the opportunity to examine the cumulative effects of stress on the body, the role of secondary stress mediators, and the coping strategies used by AA women (see Harding et al., 2014; McEwen, 1998). The allostatic load may explain the relationship between long-term exposure to everyday racial minority and gender stress. Also, this repeated exposure to stress results in physiological and emotional dysregulation, which may originate from any or all level of the SEM with a potential to impact obesity (Geronimus et al., 2010; Geronimus et al., 2006; Glanz & Bishop, 2010; Thomas et al., 2019).

Geronimus (2001) proposed weathering to explain the physiological deterioration in Blacks' health compared to White. The author also noted that deterioration is due to the life course exposure to socioeconomic deprivation, political and cultural stigmatization mistreatment (Geronimus, 2001). The Weathering theory explains how the AA woman viewed as the "rock" in her family figuratively withers due to the psychosocial stress from all five SEM (Geronimus et al., 2010; Glanz & Bishop, 2010). Furthermore, AA women wither from the disproportionate racial injustices, sociopolitical and economic inequalities endured while living in a race-conscious society with

implications for the impact of stress on obesity (Geronimus et al., 2010; Thomas et al., 2019).

The effect of weathering on various body systems is to create dyshomeostasis (Berger & Sarnyai, 2014; van Rossum, 2017). Thus, the inflammation from weathering works together with the allostatic load as a barometer to measure obesity-related morbidity in AA women (Geronimus et al., 2010). Generally, the SEM levels' dynamic interactions may influence subclinical stress and the prevalence of obesity among AA women in Tallahassee, Florida (see Glanz & Bishop, 2010; López et al., 2014).

This study's weathering theory explains what happens when AA women face racial discrimination and prejudice based on their race and gender. Likewise, it guided my exploration of the internalized turmoil AA women experience faced with uncomplimentary stereotypes or the challenges of upholding the image of a strong Black woman (see Beauboeuf-Lafontant, 2003; Geronimus et al., 2006). AA women are in theory withering like rocks, not from environmental degradation but internalized racial and gender stress. The withering of AA women "rocks of women" due to internalized turmoil, physiological deterioration, and psychosocial stress linked to the inflammatory process of obesity (see Geronimus et al., 2010; Woods-Giscombé, 2010).

Subclinical Stress and Obesity-Prevention Strategies

The American Medical Association classified obesity as a chronic disease because they hope it will increase healthcare access for persons living with obesity (Kyle et al., 2016). With the classification, their goal was to shift from blaming the obese to addressing the environmental risk factors, increasing obesity research, and decreasing

obesity morbidity with enhanced clinical services (Kyle et al., 2016). However, critics insist that obesity is a modifiable condition that is largely preventable through personal responsibility if people eat right and exercise more (Hansen, 2014; Tanner, 2013).

The prevention strategy of counting food intake and energy output is the energy-balance theory. While the energy balance theory is instructive, an absolute focus on personal responsibility doctrine through diet and exercise as a panacea for obesity prevention does not consider its multi-factorial etiology (Marks, 2016). The crux of the national prevention strategy advocated by the CDC focuses on nutrition, physical activity, early care pediatric screening to promote health and reduce childhood obesity (DeLany et al., 2014). It also includes the use of weight loss medications, surgery, and clinical management (DeLany et al., 2014).

Critics contend that classifying obesity as a pathophysiological condition is a ploy to prescribe medications and surgical remedies thanks in part to the congressional approval of Medicaid reimbursement for weight-loss prescriptions and surgical procedures (Kyle et al., 2016). Critics see the AMA classification of obesity as a disease as a profiteering scheme than a genuine concern for the obese (Kyle et al., 2016).

A potentially effective and sustainable obesity prevention strategy should start with engaging the community and the multidisciplinary team of experts, including stress management professionals, to evaluate perennial upstream obesogenic environments (see Barrington et al., 2012; Bryant et al., 2015; Czeglédi, 2016; Stavrou et al., 2016). It is important to examine the social determinants of health, which shapes obesity to effectively address the conditions in places where people live, work, and play, which is

key to psychosocial well-being, diet, and exercises regulation (Bryant et al., 2015; Lakerveld, & Mackenbach, 2017).

What is needed is a systems approach that addresses obesity as a disease with complex causes, interacting at different levels and with many comorbidities (see Lee et al., 2017). A potential system approach to obesity prevention may increase community engagement, research, and prevention strategies (see Bagnall et al., 2019). Specifically, prevention strategies should also address the environment that creates psychosocial stress, such as the everyday subclinical racial minority and gender stress impacting obesity. AA women have expressed the sentiments that their problem is with the psychosocial, emotional, and social well-being associated with obesity and not just the diet component (see Rand et al., 2017).

A few CDC and U.S. Department of Health and Human Services initiatives propose community engagement in their Community Health Improvement Plan (CHIP). These CHIP initiatives lack financial support and political backing compared to the much-publicized diet-exercise programs or weight-loss surgery prescriptions (Kyle et al., 2016). In Florida, obesity prevention strategies include the PREVENT obesity initiative, which provides education and best practice tools to childcare providers and community members in nutrition, physical activity, and limiting screen time (Myflfamilies, 2014).

The Florida Department of Health (FL DOH) seems to understand the risk factors for obesity by addressing employees' physical, financial, and mental health wellness in a holistic approach (Mybenefits, 2019). The FL DOH is engaged in several public-private collaborations with community organizations through programs like Health Equity,

Health in All Policies, and the Barbershop Initiatives with barbers/hairdressers trained to discuss health wellness with their clients (Pinella. Florida Health, 2014).

The Barbershop initiative came from a research study supporting barbershops' effectiveness in delivering healthcare information (Victor et al., 2011). Florida provides an employee assistance program (EAP) that addresses employee issues related to stress, financial, and wellness needs (Mybenefits, 2019). Therefore, the EAP is a great prevention strategy for helping employees build stress-coping capacities. The FL DOH stated that approximately 65% of adults in Florida are at an unhealthy weight. One in three children is overweight or obese, and Florida would require \$34 billion to treat its obesity-related conditions within the next 17 years (Healthiest Weight Florida, 2020).

In the United States, nearly four out of five AA women are overweight or obese. Within Tallahassee, AA women are 0.58 times more likely to be obese, with a prevalence rate of 43% than 25% among White women (Flhealthcharts, 2020). In general, AA women are more likely to be obese than White women (Minority Health, 2017). Verbal insults that exclude, negate, or nullify AA women's thoughts and feelings in social spaces because of race and gender is a risk factor for stress that may impact obesity (Lewis et al., 2016). When described with a strong Black woman's meta stereotypes, AA women experience microinvalidation, suffer emotional suppression, and resort to unhealthy self-reliance (Jerald et al., 2017).

Prevention strategies should start with a courageous conversation. To further illustrate this concept, consider the following examples. In Pinellas County, the Foundation for a Healthy St. Petersburg, UNITE Pinellas, and the Department of Health

in Pinellas offer the "Beyond Diversity" protocol that teaches policymakers, leaders, and community stakeholders interracial dialogue. Racial dialogue aims to understand how race issues impact lives, overall growth, and health outcomes. Importantly, it teaches how to heal and move beyond the racial divide (Singleton, 2014).

Arguably, many factors affect obesity among AA women, notably race and gender prejudice, discrimination, and stress (Lewis et al., 2015). Therefore, obesity prevention strategies should also target complex factors such as social interaction at the personal, intrapersonal, community, organizational, and policy/enabling environment levels of the SEM to mitigate prejudice and discrimination (Brenchley & Quinn, 2016).

The obesity prevention strategy should also be culture-specific. One element of Black culture is religion. Public health prevention experts suggest that channeling church membership to promote social support, health, and wellness can be an effective way to reduce everyday subclinical stress (Bauer et al., 2017). An initiative by the "Sisters-on-The-Move" health literacy group, in collaboration with Harvard University, produced brochures on maintaining Black hair during exercise to promote leisure-time activity among AA women (Decaille, 2010; Hall et al., 2013). If the brochure on maintaining Black hair content is helpful, AA women would have an additional strategy to cope with the stress of maintaining a Black woman's unique hair.

AA women use food as a coping mechanism to deal with the racial minority and gender stress they experience living in a race-conscious society (Pickett & McCoy, 2018). Steward et al. (2016) suggested that emotional states contribute to the prevalence of obesity. Therefore, simply taking away the high-calorie, energy-dense, and fatty foods

without providing compensatory emotional support will not address obesity; on the contrary, it may cause more internalized turmoil, stress and paradoxically increase obesity (Marks, 2016; van Rossum, 2017). As a sample of obese AA women stated, they do not need support with the diet but the mental well-being (see Rand et al., 2017).

Summary and Transition

There is a crisis of obesity disease, which disproportionately affects AA women. Multiple risk factors are responsible for obesity prevalence. Research investigating the intersectionality of race-gender as a risk factor for obesity is sparse. Studies show prejudice and discrimination directed at "Black" and "female" persons are associated with racial minority and gender stress in AA women. Great diet plans fail because they are not culturally accepted foods. Several neighborhood parks remain desolate and unused because AA women do not consider a leisure-time physical activity or maintaining a normal BMI as the most important priorities amidst other life struggles. The social pressure for AA women to keep their curves as beauty standards constitutes racial and gender stress. Less is known about the impact of everyday racial minority and gender stress on obesity among obese AA women. In Chapter 3, the methodology section, I discussed the research design, sampling, instruments, and data used for this study.

Chapter 3: Research Method

Introduction

The purpose of this study was to explore the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among AA women. Obesity is a modifiable disease that disproportionately affects AA women's health and well-being (Ogden et al., 2014; Pan et al., 2009). Obese AA women are at a higher risk for breast and endometrial cancers, cardiovascular diseases, Type II diabetes, strokes, fibroid-related infertility, and musculoskeletal disorders (Pianin & Ehley, 2014).

The etiology of obesity is multifactorial and complex. For instance, most studies have identified poor diet and inadequate physical activity as the primary causes of obesity (Baruth et al., 2014; DeLany et al., 2014). Other researchers have recognized a link between psychosocial stress and obesity (van Rossum, 2017; Waters et al., 2015). However, limited research has addressed subclinical racial minority and gender stress as significant factors impacting obesity. Therefore, a further examination regarding how racial and gender stress may impact obesity can potentially inform policy and guide effective obesity prevention strategies.

In this study, I conducted a thorough review of previous and current obesity research works to explore the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among AA women. To meet the data collection needs, I used a phenomenological approach, which allowed a face-to-face or one-on-one data collection method to investigate the impact of the lived experience of racial and gender stress on obesity among AA women.

Research Design

I chose a qualitative research design, which I conducted through a nonexperimental descriptive study (see Creswell, 2014; Patton, 2015). The origin of the qualitative design is debatable. Still, many researchers point to Freud or Piaget as developers of the qualitative approach because of their early works on case studies involving observations and in-depth interviewing (Bogdan & Biklen, 1982; Erickson, 2011). The qualitative design approach emphasizes the lived experiences or perception-based meaning, process, and the assessed qualities of the studied phenomenon (Denzin & Lincoln, 2013).

An effective data collection tool applied in this study was the interpretivism paradigm that explored the impact of racial and gender stress on obesity. This paradigm's basics are that people construct their version of reality (Patton, 2015). Likewise, based on the model's assumption, lived experience is a subjective social reality and, thus, best studied in a sociohistorical context (Creswell & Poth, 2017). Therefore, the phenomenon investigated was the participants' version of a socially constructed reality, which is the understandable meaning of how obese AA women reflect on the knowledge gained after living through racial minority and gender stress.

This approach was appropriate and effective in studying a sample of obese AA women in their natural settings in Tallahassee, Florida. The participants explored their experience of racial minority and gender stress on obesity and the meaning they ascribed to it (see López et al., 2014). The use of phenomenology helped to capture the participant's experiences and analyze emerging categories, concepts, and themes while

staying true to the constructs of bracketing, intuiting, analyzing, and describing (see Creswell & Poth, 2017; Janevic et al., 2014).

Additionally, I incorporated the researcher's reflexivity. Using prospective reflexivity, I avoided participant and researcher bias in the study, especially during data collection, analysis, reporting, and publishing stages (see Attia & Edge, 2017; Sorsa et al., 2015). Participant bias happens when a participant responds with a socially acceptable answer rather than their true experience or feelings (Creswell & Poth, 2017). I addressed participant bias by asking open-ended, probing, or questions framed differently to encourage them to speak their truth comfortably (see Patton, 2015). Researcher bias occurs when a researcher only includes data they deem relevant or interprets available data to align with their hypothesis (Creswell & Poth, 2017). The researcher bias was addressed by leaving behind preconceived assumptions and analyzing all data in a clear and unbiased method (see Patton, 2015).

Next, using retrospective reflexivity, I remained conscious of how the research process may affect me due to proximity to the study participants (see Attia & Edge, 2017). I hope that my study will influence how obesity is perceived and managed. Additionally, my study may lead to a positive social change for obese AA women, recognizing racial minority and gender stress as obesity risk factors (see Gale et al., 2013).

Methodology

I applied a qualitative research methodology to my study to explore the impact of subclinical racial minority and gender stress on obesity among AA women. The rationale

for choosing this methodology and phenomenology design over other approaches was to create the opportunity to probe into obese AA women's lived experiences with everyday racism and gender-based stress (see Creswell, 2014; Husserl, 1970). The qualitative research design was the most appropriate for my study because the data consist of words. However, words that capture the participants' subjective social reality are inductive and naturalistic (Creswell, 2014; Denzin & Lincoln, 2013).

Furthermore, the qualitative design provided me with the reflexivity to corroborate the participants' socially constructed realities as subject matter experts of their narratives (see Creswell & Poth, 2017). The qualitative design also presented a holistic protocol for exploring the complex social situations, capturing individual experiences and meanings ascribed to their realities (see Rudestam & Newton, 2015).

Research methodology critics dismiss qualitative research results for lack of trustworthiness and rigor as a scientific data collection method (Hadi & Closs, 2016). The critical perception is that qualitative research does not meet the definition of scientific research concerning rigor and credibility compared to the traditional quantitative design that is experimental, with random sampling and double-blinded participants and researchers (Patton, 2015).

In contrast, the qualitative design establishes trustworthiness through credibility, dependability, transferability, and confirmability (Creswell, 2014). In this study, I established credibility through triangulation and member checking by linking findings to reality, using multiple data sources such as interviews and observations, and allowing

participants to review and clarify information for accuracy (see Birt et al., 2016; Nowell et al., 2017).

Fundamental to the use of phenomenological exploration is the expectation that I lay no claim to theories suggesting or proving causal explanations or any objective reality (see Patton, 2015). Therefore, I stayed true to phenomenology's purity to explore, document, and report how the participants experience their world and how their lived experience shapes their view of reality (see Creswell & Poth, 2017; Rudestam & Newton, 2015). My study's subjective nature aligned with the phenomenology approach as a tool for examining how people construct meaning (see Denzin & Lincoln, 2013). Before choosing phenomenology, I considered but did not select any other qualitative data collection methods due to poor alignment with my study.

To illustrate this concept, consider the following examples. In an ethnography study, researchers can use direct observation to paint people's portrait and their culture. Thus, it is appropriate when the goal is to enhance cultural awareness and sensitivity (Rudestam & Newton, 2015). In grounded theory, researchers can develop a theory(s) about a phenomenon, which emerges from the data (Creswell & Poth, 2017). The knowledge derived from the study provides the folder to acknowledge, describe an experience in a new way, and clarify a little-understood problem through a simultaneous data collection and analysis (Creswell & Poth, 2017). Thus, it is most appropriate when the goal is to create a new theory instead of using an existing one (Patton, 2015).

In the case study theory, researchers focus on a single person, event, or monitoring the same activities across a specific timeframe (Creswell & Poth, 2017).

Moreover, it is appropriate when the goal is to analyze services, evaluate approaches, and test pilot programs (Patton, 2015). In contrast to these three approaches, phenomenology aligned perfectly with this study focused on the lived experiences and understanding of how human beings experience their world (see Creswell & Poth, 2017).

I used this research design to elicit socially constructed reality's lived experiences, as told by my study participants' first-person perspective (see Farina, 2014; Moola & Norman, 2017). The lived experience is the understandable meaning of how AA women reflect on the knowledge gained after living through the experience of racial minority and gender stress impacting obesity. Using descriptive phenomenology – I "bracketed off" my prior understanding of the impact of racial minority and gender stress on obesity while maintaining preconception neutrality (see Creswell & Poth, 2017).

Accordingly, qualitative research design and descriptive phenomenology facilitated the methodology's alignment with the inquiry and research questions. In addition, descriptive phenomenology gave me the best opportunity to focus the inquiry on AA women, the socially constructed reality, and the meaning they ascribe to the lived experience of the impact of racial minority and gender stress on obesity.

Sample Type

The sample type for my study came from the sampling of a nonprobability purposive sample and snowball sample. The participants' solicitation began after I received the Walden University Institutional Review Board (IRB) approval ((IRB approval study # 05-28-20-0330973). The next step of the process occurred when I visited several recruitment locations in Tallahassee. The locations included two

predominantly AA churches, three hairdressing salons, two gyms, and the Governor's Square mall.

I placed the study flyers (see Appendix A), announcing the research on the respective facilities' bulletin boards. I also handed out the study flyer at the local grocery stores, apartment complexes, malls, and recreation centers. The flyer contained information about the study's purpose and voluntary nature, including the phone number to contact me if the respondents were interested.

When interested survey respondents contacted me, I conducted a brief telephone interview using the demographic screening questionnaire (see Appendix B). The purpose of this interview was to screen interested participants to ensure they met the inclusion criteria and were not inadmissible due to any known exclusion criteria of the study. Moreover, I solicited the interested respondents to refer their family or friends they thought might be interested in the study. Friends and family's referral by the interested respondents and study participants is snowball sampling (Patton, 2015). The rationale for using a purposive sample type is the freedom it provides to be selective in participant solicitation and selection to acquire sample types that meet the required target population characteristics and study objectives (Palinkas et al., 2015).

When a respondent met the study criteria during the prescreening interview, I informed the respondent that they had qualified to participate in an in-depth one-on-one follow-up interview that could be done face-to-face or over the phone. All respondents who volunteered and qualified for the study received additional information about the study's purpose and the participants' roles as experts of their lived experience.

Research Questions

The following research questions guided this research and met the purpose of my study:

RQ1: What lived experience of racial minority and gender stress exists in a sample of obese AA women?

RQ2: How do the lived experience of racial minority and gender stress impact obese AA women?

RQ3: What factors promote emotional eating and inhibit physical activity participation among obese AA women?

RQ4: What coping mechanisms exist to reduce the impact of racial minority and gender stress on obesity?

Instruments

In my study, I used the following instruments: A research study flyer, pre-screening demographic questionnaires, and interview protocol subject approved by the IRB approval. I created the interview protocol from the synthesis of two existing validated sources: The Perceived Discrimination test (see Kessler et al., 1999) and the Experience of Discrimination test (see Krieger et al., 2005). I also relied on the oversight role of the Walden University's IRB to guide me through the process, requiring the participants to meet inclusion criteria, uphold study consistency, and offer human research participants protection. Another essential instrument in qualitative research is the researcher (Creswell & Poth, 2017).

Role of the Researcher

My role as a researcher in this study was to capture the participants' detailed thoughts and feelings. I accomplished this goal by carefully striking a balance in the observations, note-taking, and conversations with the participants who talked about personal, raw, and stressful experiences. As a researcher, I navigated these difficult conversations by employing great observation and interview skills. Then, I documented individual experiences in words, categorized emerging themes, and provided a comprehensive description of the phenomenon (see Smith, 1999). Additionally, I endeavored to understand the relevant information to look for in the field, processed observations, and the pertinent data to write down (see Rudestam & Newton, 2015).

In this study, I maintained data integrity by ensuring that the participants' information was reliable, valid, and presented without fear or inducement at the interview time. Furthermore, in my fiduciary capacity, I was a trusted confidant, the study participants' protector, and secured the data repository (see Creswell & Poth, 2017). I accepted the responsibility to guarantee that the study reliably reflected the participants' views on the investigated phenomenon. Data were verified by member checking to validate accuracy, authenticity, and the linked interpretations (Birt et al., 2016).

After the study completion, I provided the reflexivity, acknowledged biases, and bracketed prior knowledge to remain preconception neutral, allowing the readers to appreciate the lens through which the study was conducted (see Sutton & Austin, 2015). In this study, the purpose was not to establish a generalizable outcome but rather to

explore the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among a sample of obese AA women in Tallahassee, Florida.

Target Population and Participants

This study's selected population was a sample of obese AA women ages 45 to 64 in Tallahassee, Florida. The demographic of AA women were chosen because they constituted the highest obesity prevalence among all age groups. The 45 to 64 age group has the highest risk of contextualized stress and a greater risk for obesity-related health outcomes than the general population (Agyemang & Powell-Wiley, 2013; Parrish et al., 2011; Thomas et al., 2019). Dworkin (2012) opined that qualitative design requires a smaller sample size compared to quantitative design because the focus is to elicit an in-depth understanding and to explore the "how" and "why" of the study phenomena.

After receiving Walden University's IRB approval, I used a purposive and snowball sampling method to recruit participants until I achieved saturation. The modalities for deciding the sample size for a qualitative study continue to attract industry experts' divergent views (Rudestam & Newton, 2015). Therefore, I opted to strike a balance using a proposed sample size that fell within the recommended guidelines established by phenomenological studies experts and met Walden University's IRB approval. To further illustrate this concept, consider the following examples. Creswell (2014) suggested 5 to 25 participants, Morse (2000) quoted six to ten participants, and other researchers suggested six (Denzin & Lincoln, 1994) and six to eight (Kuzel, 1999).

Sampling in the Black population comes with challenges due to outsiders' mistrust because of the Tuskegee experiment's history etched in their memory (see

Reverby & Foster, 2010). I gained the trust of the AA community in Tallahassee, Florida, by engaging with individuals, civic leaders, and community stakeholders and demonstrating my ties, competence, and positionality to allay their fears and concerns (see Cohen et al., 2010; Cyril et al., 2015).

The inclusion criteria were obese AA women between the ages of 45-64 residing in Tallahassee, Florida, and a BMI of ≥ 30 kg/m². Additional criteria were exposure to racial minority and gender stress, no history of confusion, or memory loss. The participants should also have a college-level education, a paid job, a permanent address, and an annual income of \$42 418. The median household income for Tallahassee, Florida (Census Bureau, 2020). The annual income of \$42 418 is the income of a middle-class family in the target area, so participants who earn this income and above met the assumption of not being financially stressed (see Census Bureau, 2020). The participants should also meet the education, employment, income, and housing criteria based on self-reported data. The selection of information-rich participants not unduly burdened by low SES or a mental condition diagnosis is part of the study criteria necessary to improve the study's efficiency and validity.

Data Collection Process

The data I collected for this study came from a one-on-one semi-structured interview with open-ended questions, which is estimated to last 1 to 2 hours. The one-on-one in-depth interview was primarily the source of data acquisition, in addition to data from observations and field notes (Creswell & Poth, 2017). Initiating face-to-face or one-on-one interviews can be awkward, so I used the "courageous conversation" icebreaker

protocol, which celebrates individuality, heritage, and personal story (see Singleton, 2014). The "courageous conversation" protocol also advocates a two-minute introduction that encourages people to discuss their name, place, and story (Singleton, 2014).

Besides, using the courageous conversation protocol warmed up the participants, built rapport, and encouraged them to share issues about their racial and gender identities and their impact on obesity. I elicited the participants' experiences using phenomenology with SEM and the MST (see Soriano, 2013). Community members needed to feel at ease to cooperate, engage and provide honest responses; if they sensed prejudice, discrimination, or disrespect, they could have provided token answers or not participate at all (Cohen et al., 2010; Cyril et al., 2015).

These were my data collection tools: study flyer, screening questionnaire, and interview protocol labeled Appendix A to C. I created the interview protocol from the nine-item modified Perceived Discrimination and Experience of Discrimination validated tests (see Kessler et al., 1999; Krieger et al., 2005). Combining these two tests, I created an effective interview protocol that made participants feel comfortable answering the open-ended questions and improved response documentation. For the interview stage, I was an active listener. I also had a good recording process to capture and record responses (using two iPhones and a tape-recording device for data redundancy). When necessary, I used follow-up leading, probing, or clarifying questions to clarify the participant's responses. I chose the one-on-one interview over other data collection methods, such as the focus group. The one-on-one interview format provided the participants with a better framework to share their thoughts and feelings about the impact

of racial minority and gender stress on obesity without fear or favor (Patton, 2015). Conversely, focus groups would require interviewing more than one person at once, subject to a dominant member takeover, minimal sharing, and a time-consuming undertaking (Creswell, 2014; Leedy & Ormrod, 2010).

Data Analysis Process

The procedures and steps of a qualitative research data analysis are a bit more nuanced. As a result, I approached this data analysis process in systematic, rigorous, and inductive steps. First, I generated and organized the transcripts from the raw data obtained from participants' audio-recorded responses and field notes (see Saldaña, 2016). In the second step, I explored and familiarized myself with the data (see Moola & Norman, 2017). In the third step, I created primary codes after reading the transcript to find the data's commonly occurring concepts. Besides, I created a chart to organize the codes for each transcript (see Saldaña, 2016). In the fourth and fifth steps, I recognize themes, patterns, and categories. Lastly, I performed a synthesis of cohesive final themes based on a chart of themes (see Moola & Norman, 2017).

I also created a schema of themes linked to data sources such as interview transcript excerpts. Additionally, after careful consideration, I used a mix of manual coding and NVivo software. The NVivo software provided speed and consistency of results. Also, I did a lot of manual coding because it allowed me to stay closer to the data (Bergin, 2011; Saldaña, 2016).

Furthermore, I safeguarded the data sources' integrity and the study's conclusion using member checking and audit trail as tools to enhance trustworthiness (see Creswell

& Poth, 2017; Hadi & Closs, 2016). Thus, I believe that the research findings are an accurate representation of the lived experiences of subclinical racial minority and gender stress as significant factors impacting obesity expressed by a sample of obese AA women in Tallahassee, Florida (see Rudestam & Newton, 2015).

The data I derived from the interviews represent an array of subclinical racial minority and gender stress experiences as significant factors impacting obesity among AA women in their natural setting (see Creswell, 2014). The data analysis plan I utilized followed the industry-standard process of coding and thematic analysis. At the end of the study, I presented a detailed report, which represented the study participant's lived experiences, the researcher's reflexivity, and potential implications for positive social change implications (see Creswell & Poth, 2017; Somekh & Lewin, 2005).

Ethical Considerations

I began this research study with a thorough understanding of ethical standards, including protecting human research participants and providing ethical assurances. I addressed any potential ethical issues by seeking approval from Walden University's IRB to conduct the research. Secondly, as part of this study's ethical consideration plans, I used a research design and methodology aligned with my study to collect accurate data from the participants in their natural setting (see Denzin & Lincoln, 2013). My priority was to execute fiduciary responsibility with relational ethical integrity, protect the participants' privacy, and "first, do-no-harm" (see Rudestam & Newton, 2015).

I was aware of the historical misconducts against human research subjects. One such harm was against the AA population, who are the target population for this study

(Schneider, 2011). Ethical consideration has infamous histories. First was the case involving human research subjects in Nuremberg, Germany concentration camp, and later the Tuskegee, Alabama syphilis experiment (Reverby & Foster, 2010). In the Tuskegee example, the researchers denied participants effective penicillin treatment to achieve their goals of observing the untreated course of syphilis in Black men (Katz et al., 2008; Reverby & Foster, 2010). The sordid history led to mistrust among AAs towards government agencies and researchers (Cyril et al., 2015; Jorgensen et al., 2010).

Thus, I conducted my research study with scientific integrity, followed ethical principles and guidelines with the primary goal of protecting human research subjects by adhering to the principles of respect of persons, beneficence, and justice (see Nishimura et al., 2013). I promoted voluntary participation (Slade & Prinsloo, 2013). Besides, I ensured that participants understood that they have a right to stop, decline to answer any question, withdraw participation without fear of penalty, or losing any study benefit. Also, the participants I selected for this study received a briefing on the purpose, procedure, and duration of the study, in addition to the risks and benefits of participation (see Sanjari et al., 2014). Moreover, all participants received a token \$25 gift card as compensation for their time, regardless of the degree of participation.

All participants were required to provide honest insights regarding their lived experience of the impact of racial minority and gender stress on obesity. Consequently, I informed participants that they would be asked to recall and explore uncomfortable topics. The topic relates to the impact of subclinical racial minority and gender stress on

obesity, which may involve stigmatized body weight, racial and gender-based prejudice, and discrimination, potentially causing psychological trauma.

I disclosed a priori any known potential health risk of this study, including the availability of referrals to counseling services, with the fact that I do not have the budget to pay for any of the counseling sessions (see Sanjari et al., 2014). I provided confidentiality and privacy policy documents for all participants with the guarantee to keep their protected health information, privacy, and confidentiality secured (see Kaiser, 2009). It was my ethical duty to reflect inwardly and collaborate outwardly through receptive sensibility. Hence, I accepted the version, interpretation of the socially constructed reality, and the understandable meaning of how obese AA women reflected on the knowledge gained after living through the experience of racial minority and gender stress (see Tamariz et al., 2013).

Summary and Transition

This chapter outlined how I used a qualitative research design to explore how subclinical racial minority and gender stress impact obesity. Equally, I presented how I used the phenomenology approach to gather information through multiple data sources. This study aimed to explore subclinical racial minority and gender stress as significant factors impacting obesity among AA women. This chapter addressed the target population, instruments, and the role of the researcher. I accepted the fiduciary responsibility to maintain the participants' privacy and confidentiality and, above all, following the doctrine to "first, do no harm." Consequently, I fulfilled this pledge by

ensuring that this study's final report did not contain any protected health information or unique identifiers to prevent potential deductive disclosure (see Kaiser, 2009).

I conducted the initial screening of participants over the phone. I conducted a face-to-face or one-on-one interview over the phone with respondents who met the study criteria. The face-to-face interviews took place at the public library location; other interviews were conducted over the phone when participants expressed fears of contracting the COVID-19. All interviews lasted a maximum of 1 to 2 hours. The average length of time was 50 minutes. I allowed participants to speak freely and candidly when answering the research questions. I used the standard qualitative coding of the interview transcripts, notes, text, and other documents in the data analysis plan.

Moreover, I categorized and synthesize any emerging concept into themes that mirrored the participant's lived experience of the impact of racial minority and gender stress on obesity among obese AA women. Next, chapter 4 is a detailed presentation of the results from this study, which I synthesized by themes using the phenomenology traditions. Overall, I presented findings that allowed readers to see how the study participants painted their lived experience of the impact of subclinical racial minority and gender stress on obesity on a qualitative canvas.

Chapter 4: Results

Introduction

The purpose of this study was to explore the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among AA women. For this study, obesity was defined as a BMI of ≥ 30 kg/m² (see Kyle et al., 2016). Subclinical stress was defined as individual experiences of racial minority and gender stress symptoms, short of the threshold for a clinical diagnosis of stress (see Helms et al., 2017). Insights were obtained from a nonprobability purposive and snowball sample of AA women. The participants reported the lived experience of racial minority and gender stress on obesity through semistructured, open-ended, and in-depth interviews. Data sampling, collection, and analysis were performed until saturation was achieved when no new information was discovered in the data analysis. Recurring themes and patterns, which emerged from data analysis, provided the fodder to answer the four research questions that guided this study:

RQ1: What lived experience of racial minority and gender stress exists in a sample of obese AA women?

RQ2: How do the lived experience of racial minority and gender stress impact obese AA women?

RQ3: What factors promote emotional eating and inhibit physical activity participation among obese AA women?

RQ4: What coping mechanisms exist to reduce the impact of racial minority and gender stress on obesity?

These research questions offered the context, and the interview protocol provided the framework to examine the impact of racial minority and gender stress on obese AA women. Beneath the statistical data on obesity is the reality of AA women and a community for whom obesity is an existential threat. The research participants presented a complex array of lived experiences; still, an analysis of the results showed (a) obesity remains a prevalent public health issue among AA women, (b) stress related to racial identity impacts obesity, and (c) gender as a female is viewed as a risk factor for the prevalence of obesity.

In this chapter, I report on the participant's demographic profiles, findings, and thematization of invariant constituents through data analysis. I also conclude the chapter by presenting the interview results.

Research Setting

The participant recruitment and interviews took place under a cloud of nationwide political and social unrest, with demonstrations against racial injustices and police brutality across several cities, including Tallahassee, Florida. I conducted all in-person interviews at a public library in Tallahassee. Inside the library, I used the private meeting room assigned upon reservation through the Leon County Public library system. The room capacity seats 12 and has a conference table and chairs. The room's basic equipment types were wireless smart tv (VGA & HDMI) cable connections, enough power outlets to plug in audio recording devices, and other types of equipment available upon request.

The interview room was safe, soundproofed, and no crisscrossing wires or hazards posed a threat to the participants' safety. There was adequate security at the library meeting room because it had secured access and privacy walls. Due to the post-COVID-19 new normal realities, I used a spacious meeting room that provided more than 6 ft of social distance between the researcher and the participants. I provided personal protective equipment (masks, face shields, gloves, and hand sanitizers) for the participants' safety. A total of eight participants (61.5%) were interviewed in person.

However, five participants (38.5%) expressed fears or anxiety about the COVID-19 when I proposed a face-to-face interview lasting 1 to 2 hours. I offered a one-on-one in-depth phone interview for the participants concerned about in-person meetings due to fears of contracting the coronavirus. A one-on-one in-depth phone interview (a modification to the original face-to-face interview) was a pragmatic approach given the continuous need for social distancing and accommodation for participants who harbored lingering fears and anxiety about coronavirus at the time of the interviews.

Furthermore, my selection of the face-to-face interview method or one-on-one in-depth phone interview method provided safe spaces, the unique nonthreatening environment offered by the public library or individual homes. The comfort, privacy, and convenience of the interview location of choice encouraged the participants to explore, speak freely, and share their lived experiences. I presented identical questions to each participant for consistency. Necessary changes were made to interview dates and appointment times to accommodate personal emergencies for the participants. The library and participant's home locations became the learning, research, and idea incubating

spaces, making the AA women feel like they had a seat at the table in public health discussion, health equity, and obesity management.

Participant Recruitment

A Walden University IRB approval was received before I began participant recruitment. The recruitment exercise started with posting the study flyer (Appendix A) in specific organizations in the community with a high AA population and patronage by AA women in Tallahassee, Florida. I posted flyers in seven locations: two predominantly AA churches, a gym, a physical exercise center, a recreational and entertainment club, and the Governor's Mall. The flyer contained important information that announced the study, the voluntary participation nature, and the information I wanted to learn from the participants. Other items on the flyer were the eligibility criteria, the available token reward for the time the participants would sacrifice for the study, and how to contact me. Recruitment was done based on purposive sampling. I obtained additional samples through snowball sampling, meaning some participants referred their friends and family for the study upon completing their interviews.

Study Participants' Demographics Profile

During the prescreening, 25 AA women who responded to the study flyer were screened using the screening questionnaire (see Appendix B). Among those prescreened, 18 participants qualified for this study. The qualified participants were 100% AA women, ages 45 to 64, with a median age of 50. The self-reported height ranged from 4' 11" inches to 5' 9", with a median height of 5' 4". The weight yielded a calculated BMI range of 30.2 to 46.4, with a median BMI of 36.9. The participants' demographic profile

breakdown (see Table 2) showed 23.08% (3) of the women were married, and 76.92% (10) were single.

The SES profile showed 100% of the women (13) earned a Bachelor's degree, 46% had a Master's degree, and 15.4% held Doctorate degrees. One participant had three Master's degrees. All 100% of the women (13) were gainfully employed. All 100% of the women (13) earned an annual household income of at least \$42 418 or higher; the mean income was \$59 307. Moreover, 100% of the women (13) sampled reported being in good health and had stressful racial minority and gender stigmatization experiences.

Pseudonyms were used in this study when referring to the participants. Using the pseudonyms protected the participants' identities, encouraged honest communication, and provided the participants with unique identifiers. The pseudonyms were better than the code numbers because the names signified that I humanized and respected the AA women who endure routine microaggressions and insults. The participants and the assigned pseudonyms were as follows:

- participant 1 – Asia
- participant 2 – Nia
- participant 3 – Latifa
- participant 4 – Jada
- participant 5 – Kecia
- participant 6 – Gwen
- participant 7 – Tanya
- participant 8 – Ebony

- participant 9 – Imani
- participant 10 – Catika
- participant 11 – Aisha
- participant 12 – Deja
- participant 13 – Raven

Table 3 outlines the tabulated information for each study participant, including code names (assigned pseudonyms), age, weight, BMI, marital status, education level, occupation, and household income.

Table 3

Study Participants' Profile

Code Names	Age	Height	Weight	BMI	Marital Status	Level of Education	Occupation	Household Income
Asia	48	5' 2"	165	30.2	Single	Doctorate	Healthcare - CEO	\$65,000
Nia	52	5' 8"	298	45.3	Single	Bachelors	State of Florida	\$55,000
Latifa	50	5' 4"	205	35.2	Married	Doctorate	Public Health	\$70,000
Jada	50	5' 6"	238	38.4	Married	Bachelors	Teaching	\$44,000
Kecia	46	5' 5"	218	36.3	Single	Masters	Engineering	\$75,000
Gwen	50	5' 9"	222	38.2	Single	Bachelors	State of Florida	\$45,000
Tanya	47	5' 7"	225	35.2	Single	Masters	Florida State Uni.	\$55,000
Ebony	45	5' 5"	188	31.3	Married	Masters	Accounting	\$85,000
Imani	48	4' 11"	230	46.4	Single	Bachelors	Cosmetology	\$90,000
Catika	56	5' 4"	203	34.8	Single	Masters	Social Services	\$47,000
Aisha	52	5' 4"	262	45	Single	Bachelors	Accounting	\$47,000
Deja	48	5' 6"	220	35.5	Single	Bachelors	Home Healthcare	\$50,000
Raven	58	5' 2"	180	32.9	Single	Bachelors	E-Commerce	\$43,000

Data Collection and Storage

A total of 25 AA women who showed interest by responding to the study flyer (see Appendix A) posted in six different places around the community were prescreened. The first data collection tool used was a demographic Screening Questionnaire (see Appendix B). The questionnaire consisted of a brief introduction, which identified me as the researcher and had 15 questions that took approximately 10 minutes to administer to determine the respondent's eligibility. I thanked the respondents for answering the call for research study participation, explained the research's sensitive nature, the number of interviews, the estimated time requirements, and clarified that participation was completely voluntary and confidential.

Respondents were informed that the voluntary participation meant that they could choose to withdraw at any time or decline to answer any question without penalty or fear of losing any benefit to which they were otherwise entitled. The study's sensitive nature referred to the recall of personal struggle with obesity, racial and gender stress, prejudices, and discrimination, which may have caused feelings of distress. Although the anticipated psychological state did not exceed the risk of daily life, I provided free or very low-cost 24-hour counseling for participants to address any psychological distress caused by participating in the study. The services were offered through NAMI Tallahassee, 2-1-1 Big Bend, Ability 1st., and Apalachee Center.

Respondents were told that demographic information such as age, weight, BMI, marital status, education, occupation, and household income would be collected as well as other study-specific questions to determine eligibility. For example, respondents were

asked the following sets of questions (a) Are you between 45 and 64? If yes, how old are you? (b) What is your height in feet and inches? (c) What is your current weight in pounds? (d) Have you attained a college level of education? If yes, what is your highest level of education? (e) Including yourself and anyone else living with you, what is your combined annual household income? And (f) Have you experienced racism (prejudice or discrimination against you because of your race) and sexism (prejudice or discrimination against you because of your sex)? All personal health information data collected from respondents who did not qualify or qualified but elected to withdraw from the study were summarily destroyed. Once eligibility was established, all respondents were informed of the decision, including those not selected for the study.

A total of 25 respondents were prescreened, 18 were qualified, and seven did not qualify. Of the 18 respondents who qualified, 13 took part in the study. Two respondents did not show up for their scheduled interviews. Moreover, two respondents who qualified and showed up for the scheduled interview changed their minds midway through the interview. The respondents offered reasons for changing their minds. One respondent explained, "I am sorry, I can no longer commit to the 1 to 2 hours-long interviews. To be honest, I thought I could complete the entire process in 15 minutes or less."

The other respondent is 28 years veteran with the police department and met the study's inclusion criteria during prescreening but later declined to participate. The respondent stated that "This has weighed heavily on my mind. I am not going to lie; the recent protest against racism and police brutality has me messed up." The respondent cited a possible threat to her retirement, marginalization at work, and reprisals from

colleagues for seemingly speaking out against the force. The respondent also claimed that she fears discussing her personal experience of racial and gender discrimination on tape. Besides, the respondent was afraid to discuss her experience of racial discrimination, especially within the police force, which might support the Black Lives Matter movement against the police's thin blue line. Although I reassured the respondent that I guarantee and provide the utmost confidentiality and free or low-cost counseling services, she maintained discomfort with participation. The respondent was not included in the study.

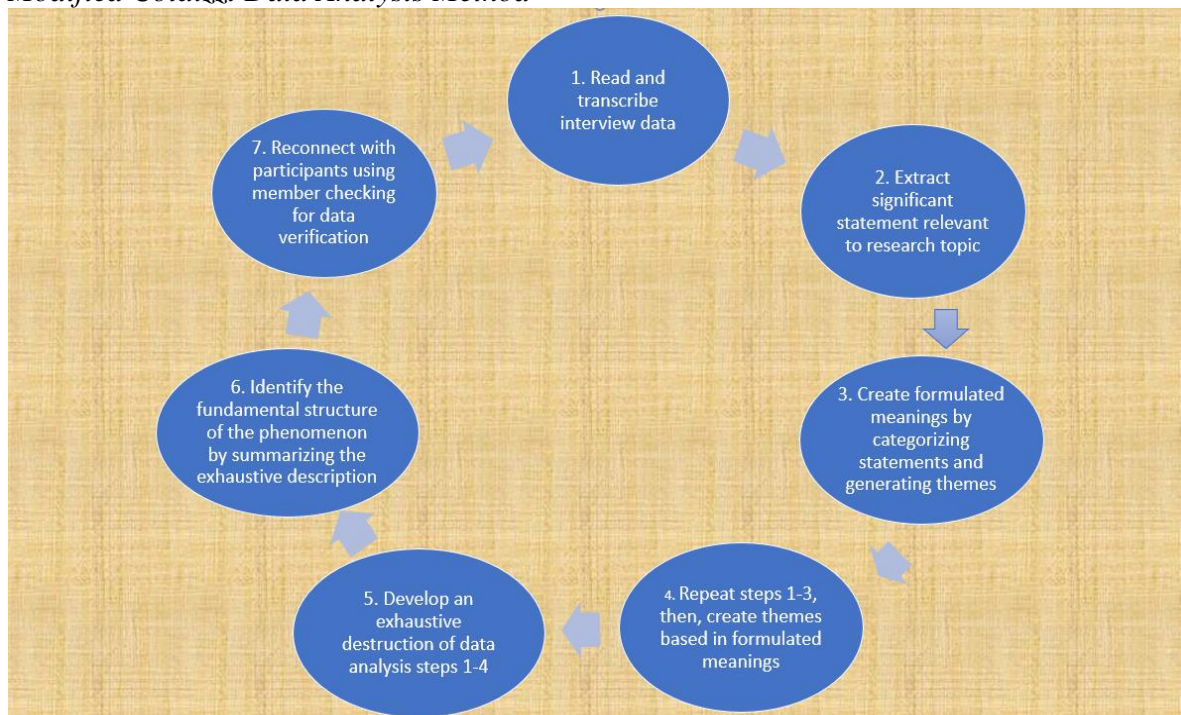
Eight interviews were scheduled at the designated public library private conference room, while five interviews were conducted one-on-one over the phone. Upon arrival at the interview venue or when I called the participants at the scheduled interview time, I courteously greeted each participant, introduced myself again as the researcher, and clearly stated the study's purpose. Also, I described the data collection process of the face-to-face or one-on-one phone interview, semi-structured, and open-ended questions outlined in the interview protocol. Using the protocol gave me constant guidance for exploring the lived experience of racial minority and gender stress impacting obesity. I reviewed and answered the questions participants had about the study. All participants received the \$25.00 token Walmart gift card before the interview began. I audiotaped the discussions, took field notes, and used a data chart to link the participants to the corresponding data.

The data collection process included clearly expressing the purpose of the interview, easing participants on with neutral questions, and continuing with more open-ended questions. Also, I avoided leading questions and let the participants know that I

was listening by repeating or clarifying statements I did not understand. I periodically checked in with the participant to ensure they were not experiencing distress due to the discussion's sensitive nature. After the interview, I offered a summary of the participants' points and asked if the summary was correct. I informed the participants that the next step is a 30 minutes follow-up call two weeks later to review the interview transcripts. I thanked the participants for their contributions to the study. All collected data is securely stored in a locked file cabinet at the researcher's home for at least five years, as required by the university.

Data Analysis

In qualitative research, a data analysis process involves systematically reducing the bulk of the text collected. In the subsequent inductive process, data is built into categories and themes from the bottom up; the generated meaning-making themes are grouped, staying true to the original text to maintain trustworthiness (Creswell, 2014). Figure 4 shows Colaizzi's method, which provided the framework for data reduction and synthesis to reveal emergent themes (Colaizzi, 1978). Inductive thematic saturation was reached when no new codes or themes emerged from the data.

Figure 4*Modified Colaizzi Data Analysis Method*

The modified Colaizzi bottom-up approach meant that I started reading and transcribing text from the interview transcripts and notes, identifying significant statements or codes relevant to the research phenomenon, and creating categories based on the data patterns. I went back and forth between the transcribed text document, categories, and subcategories to uncover the relationships.

Moreover, it was often necessary to repeat steps 1-3 of the modified Colaizzi seven-step process. I proceeded to create themes based on formulated meanings. I wove these themes into meaningful summaries that helped to explore, describe, and portray the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among AA women. In my study, I identified the following themes. The themes that emerged from the data included (a) sociopolitical anxiety, (b) systemic

racism, (c) otherness identity, (d) hypervigilance, (e) culture, (f) unhealthy habits, (g) avoidance, (h) and social support. The emergent themes represented the participant's perspectives. I used the participants' responses to answer the research questions and developed insight into their lived experience of subclinical racial minority and gender stress. Also, I created a detailed description of the data and analysis processes from steps 1-4. The next step I took was to identify the fundamental structure of the phenomenon. In the final step, I went back to the participants to verify, refine themes and interpretations.

Data Verification

Using respondent validation (member checking), I confirmed the participants' data, the subcategories, themes derived from data analysis, and the conclusions I drew from the study. Member checking as a technique allowed me to establish the participant's lived experiences' credibility and validity. The validation process is not aimed at checking or challenging the integrity of responses given by the participants during the interview but rather to confirm the findings on multiple counts and the study's conclusion.

My data verification steps included reviewing the interview transcripts to make sure the data correctly captured the participant's experiences and words. If not, I offered the participants the opportunity to correct errors, challenge inaccurate or biased interpretations, and volunteer information prompted by the playback process I adopted during the follow-up interview. I summarized and presented the preliminary findings. The participants confirmed if the interview segments gave them the chance to share their experiences and whether they adequately expressed themselves as intended. Also, if the

themes that emerged from the data captured the essence of the lived experience statements they narrated during the interview. Participant's observations, comments, and interpretative perspectives became the fodder for additional revisions and corrections to the themes to achieve the lived experiences' co-created subjective social reality.

Results of Data Analysis

Thematic analysis was central to my data analysis approach. Using the inductive approach, the data provided by the participants determined the themes. This process required familiarization, coding, themes evaluation, and writeup (see Colaizzi, 1978; Go et al., 2013; Miles et al., 2014; Nowell et al., 2017). The interview protocol probed the participants on their lived experience of subclinical stress on obesity. They narrated what and how their accounts of racial minority and gender stress have influenced obesity. Central to the participant responses were the narrations of how stressful racial and gender discriminatory experiences superseded any considerations for healthy eating and exercise. Furthermore, participants reflected on the coping mechanisms for reducing the impact of racial minority and gender stress on obesity.

Thematic analysis of the data yielded a result of eight major themes and 16 subthemes. The themes were as follows:

- sociopolitical anxiety
- systemic racism
- otherness identity
- hypervigilance
- culture

- unhealthy habits
- avoidance
- social support

The 16 subthemes were invisible women, negative media image, institutional racism, everyday racism, angry Black woman, superwoman schema, racial profiling, and police brutality. The other subthemes were food and exercise, daily life struggles, internalized oppression, sedentary lifestyle, defiant contentment, negative reinforcement, spirituality, and stress hotline. Subthemes yielded deeper insights and experiences encapsulated within each theme. Relevant verbatim statements made by participants formed the invariant constituents that illustrate the themes. I wove the participants' stories were into themes; each formed a pattern representing the plurality of views. The participants determined the relevance of themes and answered the research questions.

Sociopolitical Anxiety

The participants believed that their life experiences are completely different from women of other racial groups. They stated that their lives had been stressful, being adversely affected by sociopolitical factors and social attitudes towards race and gender shaped by political policies. Most participants felt that they were invisible persons in the workplace; they were insulted, humiliated, and rejected because of their race. They also felt that they were invalidated, put in their lane, and never given credit for their work because of their gender. Participants identified the barrage of negative media images that painted AA women in a bad light. In the media narrative, the participant dealt with reports that dehumanized and over-sexualized AA women with a "Jezebel stereotype" or

"Sapphire caricature" depicted on TV programs as the "angry Black woman." The unflattering imagery presents AA women as perpetual complainers, hyper-sensitive to injustices, exaggerated body features, obscene makeup, and outlandish fashion accessories rocking with wagging gestures.

The participants' quotes on the sociopolitical anxiety themes were as follows:

Catika – "I am just considered a Black woman, and I am just considered, you know, a heavy-set Black woman, not the successful consummate professional that I am."

Tanya – "It is almost like I cannot be my true, authentic, and natural self. Certainly, I cannot express a range of emotions like men, and because if I do it as a woman, a Black woman, I would be dismissed and labeled 'emotional'... and said to be 'Just acting like a typical woman.'

Ebony – "I am an accountant; whenever I introduced myself, people are surprised that I am an accountant. I guess their perception is that it is always an older White guy and never an AA woman."

Imani – "As Black women, we are not respected as professionals. And even though I have been doing it longer than anyone else there, I am often overlooked, even though the students say this is the best teacher we have in this school. I do not always get the accolades for my achievements or anything, that it's not enough. I love my job, but I think

that I have a lot of pressure on me emotionally because I am always trying to be fit that mold. The corporate euro-centric mold."

Kecia – "In many of these situations, I must be twice as good to go half as far. Or I must work twice as hard to get half the reward, take your pick. Consciously or unconsciously, I am always on my toes because I know that I represent an inferior race and an inferior gender in a prejudiced world. I am being watched more closely than my male colleagues, and so all these thoughts add to our stress as African American women."

Gwen – "My gender as a woman makes me vulnerable. In the morning, when you get dressed, what do you do not to get raped? Then, being a Black woman on top of that, statistically speaking, we are more likely to be attacked, and the police will not do anything about it. Only White, blonde, and skinny women show up as missing persons on TV. I am less likely to get my picture in the newspaper because I am missing."

Aisha – "I think because as a woman, I felt discriminated against when I was applying for a job in an automotive department. The hiring manager assumed that I did not know much about cars as a woman and did not give me that opportunity. I guess they felt that a woman could not sell automotive parts."

Asia – "Women face more challenges in finding jobs, especially if the job involves manual labor. When men get laid off for whatever reasons, I think that men can get jobs

quicker than a woman because men can lift things. Yes, the physical differences between a man and a woman are an excuse for gender discrimination. That's additional stress I deal with as a woman."

Deja – "One new manager on site did not like me because I am Black, claiming that I am too outspoken, I guess he could not handle a Black woman with an opinion, or maybe he believes Black women should be seen and not heard. The manager eliminated my job after he made me train a new employee as my replacement."

Latifa – "My race as a Black woman negatively impacted my ability to succeed. With a bachelor's degree in biology and a master's in health care administration, the only job I could find was as a customer service representative. So, I got a Ph.D., and I am a program assistant, but my supervisor is a White male with a master's degree in my field. I am stressed out because I work twice as hard and get half the reward despite my high education."

Raven – "Here is the problem; it does not matter how educated a Black woman is. We do not make the same amount of money as a White woman or a White man because that's the way our society is. So, that's the first thing working against us. You can have a Bachelor's, Master's, or Doctorate. No matter my education level, I am not getting paid for the education I have received."

Kecia – "I once worked for a company that sold luxury brands, and I was singled out and spied on by my employer. I was denied promotion opportunities, and the other staff bullied me due to my skin color. I did not have a good experience working in that company, but I stayed for years enduring all that shaming and hurt because I wanted to prove my worth."

Nia – "The media push the narrative Black people are looking for handouts living as Section 8 tenants. Poverty or homelessness are not associated with a race; neither is it synonymous with Black people. Oh, no. Anyone can apply for the program, but if you listen to White people or the media, they think that only minorities use government subsidies. I know many people who are not minorities that use government subsidies; they are White."

Systemic Racism

All the participants discussed their thoughts and feelings about systemic racism and identified institutional racism as a source of everyday stress in their lives. They named several examples of institutional racism, such as the discrimination they faced in the criminal justice system, employment, healthcare, housing, and finance. The participants narrated how an AA "sounding" name meant they do not get selected for a job interview. Talking with a "Black accent" meant landlords would inform them that their house is no longer for rent, and "looking" Black meant the doctors would treat them with implicit bias, and they are assumed guilty in the justice system. The participants

expressed disappointment with the broken American dream for AA women. They were told getting a good education will guarantee them a good job and pay, but they feel this is not the experience of AA women. The participants also claimed that they must work twice as hard to get rewarded half as much as their White counterparts.

Moreover, participants identified everyday racism, such as consumer racism, discrimination when transacting any business, and tableside racism, like receiving poorer services when dining out in restaurants. The participants also pointed out the experience of "shopping while Black" when they are presumed to be shoplifters as additional sources of stress that they contend with daily.

Participants' quotes on systemic racism theme were as follows:

Asia – "We are alone in the world; there is nobody on our side. For me, I feel alone. I feel I have no one offering the support I need. I see no relief in sight for Black women if nothing is done to address structural and systemic racism. There are no resources for Black women; there's no one there to help us. It is just us against the world."

Raven – "As a Black woman, I work twice as hard to get the same thing or half as much as a White woman doing nothing. Also, no matter what kind of success a Black woman attains, athletes, celebrities, academics, or politicians, we all have the same problem, so long as your skin is black, you will be stressed. Still fat and do not have a happy life."

Latifa – "This is the sad part of our lives as AA women. We are told that when we earn higher degrees, get a great job, and earn a middle-class income, our lives and health would be better. That is a lie. When Black women get a higher education, we do not get the job that fits our qualifications. We are underemployed and underpaid. These broken dreams are because of our race, not individual failures. To know that a White woman with similar qualifications gets a better job and pay hurts more."

Nia – "When I worked at one of the largest national grocery stores, men were getting paid way more. The women were making \$10, but the men were paid \$12.50. I was a supervisor making less than the employees under me, all because I am a Black woman."

Aisha – "There was a property for rent. And I called, and I could tell on the other end of the phone that the other party was a Caucasian male. He says that the property was already rented. I then turned to my Caucasian friend and asked her to call an hour later about the property. And the owner offered to show her the property."

Jada – "I am stressed daily because of life as a Black woman; to know I am not going to be treated equally, even if I meet all the requirements. I applied for the program. I was told I did not qualify when at that time, I was employed at the same job for 17 years. My credit was an excellent 803; my background was good. A White lady that I know who did not have a job applied; they gave her time to get a 40-hour job and hold it down for three months, -- and she received a house and everything. I was denied. Go figure!"

Gwen – "So, it is the internal stress that I face because society has already set me up to fail–no, you are Black, you are fat, and you are a woman. So, no, you cannot do this job. Or if you are going to do this job, we are going to pay you less. Statistically, in the journals, women get paid so much less than a man. And then if you add on the fortune of being Black, you are going to be paid even less."

Tanya – "I spoke over the phone with a landlord, and he assumed that I was Caucasian. And he was very excited; he wanted to meet with me. He wanted to get the rental agreement going as soon as possible. I showed up at the property as the AA woman I am, and then the paperwork is no longer available. He told me, 'I am not sure if we want to move forward with this' That was real discrimination there."

Imani – "When I apply for a house, call up the landlord, and they hear my name or hear me speak, landlords often ask, 'ma, are you Black?' when I say yes, then they reply, 'I am sorry the house is no longer available for rent.' When I drove by the house, they were always empty and still available for rent."

Kecia – "I visited the emergency room a couple of weeks ago for persistent low back pain. The emergency room staff did not treat my pain; they did not try to diagnose or help me at all; they could not get rid of me fast enough. There was nothing in my history to

suggest that I was pain medication seeking. I have no issue with drug abuse or even alcohol! I believe I received poor treatment because I am an AA woman."

Jada – "I went to a dentist because my tooth was infected. The dentist said, 'You people do not take care of your teeth.' Instead of treating me as an individual, the dentist stereotyped me by saying, 'you people.' He was inferring that Black people do not take care of their teeth."

Tanya – "I visited a doctor, and during the physical exams, he kept commenting, 'Oh my goodness, you have clear skin and speak so well!' You know that was his way of saying, 'people like you do not speak this well; you must be different'... So, the doctor said, Oh, I do not expect a Black person like you to speak well or have such good skin. He was judging me by my race instead of judging me as an individual."

Deja – "At a restaurant, I was given poor service. I went to a restaurant with my White co-workers. But the wait staff never serves or asks me what I would like first. They would always ask me last, no matter where I sat at the table. They would ask my White coworkers, 'How was their food?' 'Is there anything else they can get for them?' If I ask for something or need something, they treated me like I bothered them."

Otherness Identity

The participants were convinced they suffered irreparable psychosocial harm when other racial groups treat AA women differently with contempt. They felt dehumanized, stripped of their citizenship, and unwelcome when labeled as "the other." The participants claimed that statements such as "They are not one of us," "Let them go back to Africa," and "Black people are not intellectually equal to White, they have lower intelligence quotient" perpetuated a stressful racist narrative. The participants expressed the views that labeling Black people as common thieves, dishonest, or criminals implied lower status. They insisted that people inflicted this stressful harm on AA women by words, questioning, and actions, or even with uncomfortable staring and pause when a Black person enters a gathering. Participants pointed to AA women's references as "angry Black women" when they are passionate or ascribing to her a "superwoman schema." They claimed that the labels are like giving the dog a bad name just enough to hang it; an AA woman with a besmirched reputation is an easy target of discrimination.

Participants quotes on the otherness identity theme were as follows:

Nia – "This happens so many times. If I am being described, the people would typically say 'an African American woman.' For a White woman, she is called Jane, Mary, or Mrs. Jones."

Imani – "I teach hair and cosmetology courses. At trade shows, people come up to me and said ugly things. Some would say they knew what it was like living in the ghetto. Or

they knew I grew up without a father. The level of negative stereotype and labeling against me as an AA woman was hurtful."

Raven – "When I worked for a Community College, my co-workers were White. In meetings, if I expressed an opinion about something, it is often ignored. When a White person repeats the same opinion, it will be okay. If I am passionate, I was considered an angry Black woman, and they usually say, 'Oh, she is a typical angry Black woman.'

Ebony – "Dealing with racial discrimination puts a lot of pressure on me, and I think my health and well-being take a back seat to everything. Like the superwoman schema where an AA woman is expected to be the say-it-all do-it-all person. Yeah, right. When there that much pressure to perform every time, something suffers. I push off exercise, and I do not have time for self-care."

Kecia – "I have been called all kinds of racial slurs like a "monkey," "thick lips," and "N-word." When I was shopping for clothes, I was called "fatso" by a group of White teenagers."

Asia – "As a Black woman, I am held to higher expectations for how I should express myself, how I wear my hair, or how my makeup looks. They complained my hair was crazy, my makeup was too loud, and my nails were ghetto. They treated me as if I am not human."

Jada – "Every time I go to a beauty supply store that an African American does not own, I mean one that a person of a different race owns, they watched me all the time, and it was uncomfortable. I just wanted to get in and get out. I assumed that they think I am going to steal something. They think Black people are all criminals."

Aisha – "I bought gas at a gas station. I went inside and paid the cashier. Another staff, a White man outside the gas station, automatically profiled me as a bad person, a common thief, and with low integrity because I am a Black woman. He accused me of stealing gas, not paying, and attempting to drive off. I had to stop my car and went inside with him to verify that I already paid the cashier. If the customer was a White person, they are presumed innocent, and a Black person presumed guilty."

Gwen – "I sustained a back injury which left me unable to go to work for several days. My employer had me followed, kept me under close surveillance, and even received pictures of my home and garden. That upset and unnerved me."

Latifa – "I remember being in a store, it was a Gucci store to be exact, and I was looking around, and I noticed that the security guard was kind of following me. I finally asked him if there was something he needed. He replied, 'You people always shoplift, so I have to keep an eye on you people.' I was so hurt. I felt less than 3/5th of a person."

Deja – "I was a collection agent at a credit card company and making outbound finance calls, and the customer assumed I was White, and she referred to Black people as thieves and fraudulent. She expressed how she did not like Black people. She is glad a Black person did not call her home. Little did she know I was Black."

Tanya – "I was at a professional networking event, and a company representative saw my name and said to me: 'Oh, you are the African American woman with short hair who is very sassy!' He claimed my boss warned them about me. When I met up with my boss, he admitted to it, and he laughed. I said, Well, I am not sassy; I am not a little girl. I am professional, I am direct, but I am not sassy. He said, 'We just have to figure out another way to describe you,' I said; Professional would be it."

Catika – "Everybody thinks that we are really strong that we can take it, we can bring home the bacon, fired up the pan, raise the children, and raise the man. We deal with everybody else's problems and our own, and that in itself causes a lot of stress. We are trying to work as Superwoman. As a Black woman, I think the expectation placed on me to perform contributes to stress."

Hypervigilance

All the participants expressed constantly feeling on edge. Feared for their lives, safety, and well-being because they are Black in a race-conscious American society. The participants admitted that they were preoccupied with race issues because society

reminded them daily of their racial minority status. They felt that living with a heightened awareness of the stigmatized status of being AAs and feeling that they have to watch their back was stressful and wore them out. Most participants stated that they had been called racial slurs to their faces; others stated that the offenders called them racial slurs behind their backs that were later reported to them. The participants noted undercurrents of racism and sober unsettling normalcy to racial slur usage and racial profiling in Tallahassee, like in the many Southern States.

Moreover, the participants felt that as victims of racial profiling, they were faced with code-switching choices, which masked their AA cultural identity by acting Caucasian in White spaces rather than being authentic and facing racism. The participants stated that they paid a high price for being Black. The mundane act of civic participation in the community left them with anticipation of racism. For example, a White woman exerting her White privilege could call the police on them just because she can (#Karen phenomenon). The participants stated that they constantly worry about their husbands' and sons' safety. They claimed that their fears were validated by the well-documented incidents of police brutality and Black people's killing in different settings: 12-year-old Tamir Rice in a park, George Floyd on the streets, and Breonna Taylor in her bed.

Participants' quotes on the hypervigilance theme were as follows:

Tanya – "To put it point-blank, I am on edge because of the ongoing issue of the relationship between people of color, Blacks, and police institutions. Racial profiling and

police brutality is a constant source of stress for me, a Black woman, and a Black mother."

Ebony – "You see the protest by Black Lives Matter against the killing of unarmed Black people by the police. I am always in a state of panic and concerned about my husband and my safety. We are one police encounter away from being another hashtag. Any interaction with the police can turn deadly at any moment in time. I am in a constant state of alertness."

Asia – "Racism to me is like an undercurrent, not a thick wave... I feel like it was always up under there. That I could get taken in the undertow and not even know it, but I live in fear or anticipation of racism daily. I am afraid to enjoy the amenities in my condo because I worry someone might call the police on me."

Deja – "Every day I leave the house, I have to pray. Whenever I see the police driving behind me, I get scared. I am not a criminal. My car has no deficiency, and I have no moving violations. My only crime is my Black skin, and that is all it takes."

Imani – "I am a Black mother, and I have two sons and a daughter. I do not let my children go out with worsening racism, and sometimes I worry that I am too protective. I fear my sons being killed by the police, at a store, or in the streets. Nowhere is safe these

days for Blacks. I had a conversation with my children about being Black and the danger they face."

Catika – "It is almost like I cannot get away from it. Like I must perform, I am always on edge; I cannot even relax. I am constantly on high alert and vigilant. I have the hardest time relaxing because we Black women are considered lazy. If we are not out there, if we do not have four jobs, and if we do not have six college degrees, we are vilified. If our kids are not perfect, our house is not perfect, and if our hair is not perfect, it is our fault. If our men are not perfect, our makeup is not done right, and if we do not have the perfect shape, then society and the media bombard us with negative labels."

Latifa – "Growing up as a child, I was called an African booty scratcher. It is a racial insult. So, it makes me very conscious when I am in public. I do not touch my body or scratch my body in public until this day."

Tanya – "I moved down here from Massachusetts, while in the streets, a truck full of White guys drove by, and they yelled: 'Hey, go back to where you came from, N-word!' and I was like what? I was almost in disbelief that this was happening. I read about things like that, but I never experienced it like that until that day."

Raven – "At the grocery store, I walk away from the cashier who was denying me service to serve a White man who came after me in line. I heard the cashier tell the man, 'She can wait. She is a Black woman. That N-word can wait.' I experience these insults often."

Nia – "White people call Black women names and the N-word all the time behind our backs, and when they think they can get away with it."

Gwen – "I was a state employee driving in my marked state vehicle on the way to a training in another city; a White lady thought otherwise. She called my department and reported that a Black woman was driving a state vehicle with hair rollers; that's racial profiling and discrimination."

Kecia – "I am legally licensed to carry a gun and have my permit. The second amendment only works for White people. Black people who have licenses to carry are shot and killed by the police with the excuse 'S/he had a gun.' Yes, but s/he also has a license. White people are never shot for having a gun."

Jada – "It is a sad day in this country; as a Black woman, I cannot even go downstairs to throw away my trash without panicking that I forget to take my ID. A neighbor can call the police on me, and I would be asked to prove I live here, but no one asks the White lady to prove her right to live in the apartment."

Culture

All participants stated that culture affected their attitude, belief, and behavior towards diet and physical activity participation. Many of the participants traced their family of origin back to the days of slavery. Still, most credited the cultural influence about food types, dietary preferences, and physical activities to their slave ancestors. The participants told tales of how Black dishes referred to as "soul food" meant so much to their slave ancestors. They explained that soul food such as pork intestine (chitterlings), pig feet, black-eyed peas, collard green, cornbread, mash potatoes, gravy, neck bone, yams, and okra was an array of leftover foods or unwanted parts of meat that the slave owners would not eat.

Moreover, the participants admitted that most soul foods are fried, heavy on sauces, high in saturated fats, salt, added sugar and linked to poor health outcomes. They explained that soul food was a mix of necessity, comfort food, and African heritage for the AA slaves. Most of the participants stated that their family food ritual was shaped by availability and affordability. For AA women in Tallahassee and most of the South, social interactions are centered around food; eating soul food signified history, family, and unity. Some participants claimed that they ate home-cooked healthy fresh food from the farms as children; as adults, they dine out often and ate lots of junk foods.

The participants admitted trying to eat healthier, but that soul foods tasted better; foods they ate growing up influenced their adult dietary preferences. They felt that giving up on soul food is like giving up on their proud cultural heritage. Most participants mentioned access to exercise facilities, the absence of an enabling environment, or the

lockdown created by the Coronavirus pandemic as physical activity barriers. The participants explained access as the cost, availability of recreational facilities in their community, and safe neighborhoods. Besides, they also mentioned walking trails, cycling-friendly roads, culturally appropriate exercises for Black women, and childcare options for single mothers at recreational facilities.

Some participants mentioned that exercise and Black women's hair did not go together. They stated that sweat from exercising mess up Black hair, and AA women counted the cost and time it took to fix their hair against the benefits of exercising. Many participants identified the daily life struggles of juggling single parenthood, multiple jobs, and lack of time as barriers. Others pointed to self-consciousness about body size, lack of childcare, and the perception that exercising is mostly a White thing with few culturally appropriate AA women options.

Participants' quotes on the culture theme were as follows:

Asia – "Growing up, on Sundays, we ate rice and peas and steak with gravy and salad on the side. Oxtail and tripe, chicken, turkey, and fish. Maybe some potatoes, sweet potatoes. Now, I eat a plant-based diet, so it is all vegan."

Latifa – "Food is cultural and a natural part of who we are. I used to drive miles away to find authentic AA cuisines and soul foods. Yes, I've made some modifications, I am still eating the same soul food I grew up with, but I do not eat it after 8 o'clock."

Ebony – "I grew up on a lot of soul food. Lots of fried food. I mean fried chicken, breaded pork chop, and baked chicken; it always had a heavy gravy. My mother was a cook. She always believed in every day was like a Sunday."

Kecia – "I grew up eating fresh foods from my uncle's farm. Now, I am a part of the 'microwave society.' I eat what's convenient. I always eat Chick Fil A. I cook three times a week but eat fast foods four times a week."

Imani – "I must work seven days a week, so I do not have time for exercise even if I could. Also, I do not have a White husband who is paid a lot of money to make me a trophy wife so that I can do yoga during the day or watch the sunset at the beach."

Deja – "I grew up eating traditional soul food. A lot of fried food, chitterlings, and pig feet, things that were unhealthy for you. My parents grew up eating the same food. Now, I make better choices, and I try to eat healthier. However, I still love my mash potatoes; I still love fried chicken and fried fish."

Catika – "There is a Crunch Fitness gym that's probably less than a mile from me. However, you pay for membership there. I live in an apartment complex that has a gym. But due to COVID, I do not want to go into that gym. I have back pains back; my work is physically and mentally exhausting. When I get home, I do not have the energy to exercise."

Aisha – "My weight is a barrier to physical activity participation. At my peak, I once exercised 3-4 times a week. Since I gained weight, I do not exercise anymore."

Gwen – "I know that it is important to engage in physical activity at least three times a week, yet I need to be in the right mood, not stressed to exercise three times a week, but I do not currently exercise at all."

Raven – "In my neighborhood, there is a bike trail. No gym is within proximity. I used to bike at least three times a week. I stopped because I am afraid to go outside because of being racially profiled or approached by a policeman or a White person (#Karen) calling the police on me."

Jada – "The closest recreational facility has a \$75 family fee. Also, between my job, household chores, and my child, I do not have time for exercising."

Nia – "I do not have anything in my neighborhood for exercise. I cannot go to gyms faraway because the pandemic has everything all locked down. I do not like exercising in gyms because I do not have the endurance to follow their pace. I prefer Hip Hop drumming, which is culturally relevant to me and a fun way to exercise."

Tanya – "For us, AA women, with processed hair, a weave, or other kinds of hair attachments, our hair is a significant exercise barrier. It cost too much and took a long time to fix it, to mess it up with sweat during exercise. I consider the cost and just avoid the exercise."

Unhealthy Habits

The participants also mentioned unhealthy habits caused by their race and gender as barriers to the recommended diet and exercise. They admitted carrying the family's burden, internalizing racial minority and gender stress, and faced with everyday stress eating right, and exercising are the least of their concerns. The participants lamented the fact that as women, they are natural worriers. As nurturers, they are more inclined to be concerned about racial minority and gender stress in their community because they worry about themselves, their children, and their husbands. Besides, the participants talked about the conflict they felt when addressed as strong Black women; the expectations are daunting. Still, they admitted to being proud of their strength and resilience in the face of discrimination and prejudice. On the contrary, they do not want their oppressors to see them crack or cry even when bearing heavy personal or family burdens.

All the participants expressed that physical activity participation was good for their health and aware of a sedentary lifestyle's health risk. A few participants admitted that their challenges were the lack of exercise culture and laziness. All the participants pointed to emotional eating as one way they cope with stress. They knew that eating high-calorie, high fat, and energy-dense foods caused weight gain and other health

problems. Comfort foods like chips, ice cream, chocolate, cookies, and pastries provided them instant gratification and an escape from stress.

Participants' quotes on the unhealthy habits theme were as follows:

Kecia – "I wear the badge of a strong Black woman with honor. I am proud of our tenacity, and we never let the world see us crack. What is that saying, 'Black, do not crack?' Although it means Black women are ageless, it also applies to our ability to weather the storm. But what others do not see is that we are suffering silently, with the mental and physical consequence of carrying our family's burden compounded by the stress of all these pervasive racial and gender discriminations. Our refusal to be branded as 'weak' adds to stress."

Latifa – "When I am stressed, I do not eat right. Stress makes me crave sweets and comfort foods to make me feel better. Then, I do not have the desire to exercise. I am too worried about the stress that I do not have time to pamper myself, look beautiful, or want to go out of the house. I know that throws my cortisol level out of whack, which makes me gain weight."

Jada – "When I am stressed, I eat chocolate ice cream, chips and cookies, and crackers. Mainly junk foods, which are very unhealthy."

Nia – "To have to be that woman who has it all altogether, that pressure alone is the worst stress. To be in a place where I feel like I must do certain things or live a certain way because of what others think or expect of me. I would say that is one stressful burden I bear in silence."

Ebony – "I am expected to be a superwoman to do everything, but if I lack in one area... then everyone is like, 'what the heck is going on?' Social media plays a big role. Everyone takes and posts pictures online, and I am supposed to be at a certain weight that society has deemed socially acceptable. I am stressed out viewing online content even without leaving my home."

Gwen – "Stress contributes to my weight gain because I do not eat right when I am stressed. I do not sleep properly. I do not function well under overwhelming stress. My body goes into a stressed mode, either a fight or flight kind of coping mechanism. I do not eat right; my body stores everything I eat because it knows it has to gain weight. And especially when I eat sugary food and stuff that is not healthy for me."

Tanya – "I do not cook when I am stressed; I will end up eating out. If I cook with stress, I am probably eating more fried food. The foods I eat more when I am stressed are Reese cup blizzard ice cream and sweet potato pie, cake, and sunflower seeds."

Imani – "I do not think about recreation or physical activity when I am stressed out. I do not believe it is good to drive a car to go to the park miles away, which discourages me. Sometimes it is a lack of motivation that prevents me from exercise."

Deja – "The primary reason I do not go out to exercise is that the weather is too hot outside. Also, because I am lazy and do not want to do it, and my excuse now is the pandemic social distancing rules."

Asia – "As a woman, I am more stressed because I feel like I have a heart that worries about stuff that I probably should not worry about because of what I have lived and experienced in my life. And as a woman, I feel like I carry a lot of weight."

Aisha – "Stress can cause weight gain because it is a consuming force. Fighting so hard to take my mind off an issue tends to make me turn and put it elsewhere, like eating to comfort myself. Eating comfort food to deal with stress can be a bad habit. Not eating the right food, not eating at the right time, and the portion could be a bit more than it should be. It's all about trying to take your mind off the stress, which is where the problem is."

Catika – "Being a single mother brings on stress. Finding a decent place to live and to raise my kids, to make sure they have a decent school to attend, make sure they have clothes and even food to eat. Although I am making a little above the median income, I

do not get that extra help from the government, friends, or family. Everyone thinks I have arrived that I do not need help."

Raven – "I am more emotionally attached to people and things; I worry more about discrimination against Blacks, and unlike men who can compartmentalize different issues in their heads. I have no one to turn to, so I carry the heavy burden alone. I take care of the house, bills, and no partner. I raise the kids by myself; I do everything by myself."

Avoidance

Negative coping skills centered on avoidance to deal with gendered racism stress emerged from the participants' data. There were two subthemes, namely defiant contentment, and negative reinforcement. The participants made statements about how Black women had large ethnic body frames that were not worse than racial groups with large facial features or short stature, lightweight, and petite body frame. The need to defiantly defend their weight, love the body they are born was expressed as the community resistance against AA women bashing. All the participants with self-reported heights and weights fell into the obese category. Still, they used terms like "pleasantly plump," "big-boned," and "thick," among other obesity euphemisms but never considered themselves as obese. To the participants, to be obese meant being derisively unhealthy.

The participants acknowledged negative reinforcement prevalent in the AA community coming through curve appeal with claims that Black men love AA women with "curves." They also referenced obesity apologetics suggesting that AA women should not question their weight status because they are created in God's image, and there

is safety in size. As the claims go, being a big Black AA woman makes it difficult for a would-be criminal to attack her in the streets. Other negative stress coping mechanisms the participants mentioned were denial and emotional eating. The participants who were healthcare practitioners and academics demonstrated a great deal of knowledge around weight gain and denounced BMI as the gold standard for measuring obesity in AA women. They opined that it did not differentiate between the weight that came from fat, muscle, and bone. These participants claimed that although they are classified as obese, they are more so because of big bones and muscular physique than White women. They countered that they were factually healthy.

Participants' quotes on the avoidance theme were as follows:

Ebony – "I stiff it. I avoid talking about my experience of racial discrimination.

Sometimes, I vent to Black people close to me, but I do not want to overwhelm them, so I do not talk about it."

Catika – "As Black women, we sometimes think that obesity an issue, but sometimes it's a rebellion thing. Who is to tell us how our body should be? We know that we are not accepted and do not want to accept what White people or the media say is good body weight. I want to be accepted for who I am - a big girl. Just because a person is big does not mean that they are unhealthy."

Raven – "I describe myself as 'well-endowed.' The 'chubby genes' are in our culture. We were born to be big women. I heard that obesity runs in my family; it is hereditary. They told us that if the family members are big women or big grandmothers are in the family; it is an automatic thing that the women will be big-boned. The expectation is for women to be no smaller than their thick family members."

Jada – "I do not agree that AA women are obese. It is all about genetics. In our structure, we have hips. We have thighs; we have, you know, backside. That means, of course, we will weigh more, but in their eyes, they consider that as being 'obese.' I am a full-figured woman, but I am not obese."

Gwen – "Based on what is published in the AMA Journals, I am clinically morbidly obese. When you look at me, I am just overweight, unless you are a medical doctor, and you know my BMI. If I am around friends, they call me 'thick.' Black men who like me see me as 'Pleasantly plump.' I describe myself as 'womanly.' Because women come in all different shapes and sizes, and at a certain age, we do away with the little girl or pre-pubescent shaped."

Asia – "I would describe myself as slightly above average than other AA women. I do not mean an average of White women (chuckles). I feel comfortable with my weight because other Black women around me are bigger. Truthfully, I think we AA women are in denial

about our weight. I get validation from our culture and Black men who love a Black woman with curves. Perhaps it is part of my sex appeal as a Black woman."

Aisha – "I consider myself big-boned. I am comfortable being called 'big-boned' versus 'obese.' When someone calls me 'obese,' to me, it means fat and unhealthy."

Deja – "people describe me as 'curvy' or 'thick' or 'BBW,' meaning 'big beautiful woman.' But do not call me obese because I know I am a 'nice-sized woman.' I am a healthy woman."

Tanya – "Growing up, our mothers and grandmothers told us, 'You are big-boned, and that is how you should be' and 'not to be worried about our weight.' They gave me so much confidence that I am the way I am because God created me that way."

Latifa – "For me, a big size offers safety on the streets or at home with intimate partner violence. Without a big size, me or any other Black woman may not command respect in our community."

Imani – "I am a Black woman with a college degree, two jobs, a good income, and a home. Still, I am stressed because of my race, I am still not considered equal with a White woman, and I cannot escape the racism. You cannot even rest and watch TV without seeing negative media images of Blacks. At some point, I became numb to

prejudice and discrimination. Sadly, I have also learned to ignore, deny, and not talk about it. I pretend that it is not happening. Who would want to wake up every day knowing the world does not like me, and I cannot get ahead because of my race?"

Nia – "I gained some more extra pounds, and I liked it because I used my big physique as a form of protection against men."

Kecia – "I resort to eating as one of my stress relievers to soothe my pains. I also meet with my friends to de-stress, and we often do that over food. I eat Greek pastries, or Italian pastries, fried chicken, quesadilla, and mozzarella are my legal high, my comfort food. If I am down and lonely, without realizing it, I have eaten a plateful of them."

Social Support

The participants identified the availability, identification, and use of resources as social support themes with stress hotline and spirituality subthemes as ways to deal with gendered racism stress. They narrated examples of several positive stress coping mechanisms based on spirituality that included faith in God, mindfulness practices, and indulgence in self-care as buffers against stress. Most of the participants credited biblical teachings that promoted positive body image perception and leaving their burden at the feet of Jesus to help them deal with gendered racism stress. The participants revealed that when confronted with racial minority and gender stress in the community, they took a long relaxing bath, listened to music, and meditated to deal with the stress.

Another stress coping mechanism the participants identified as useful was the stress hotline. Participants admitted that they were proud of their education, career, and independent Black women status. Still, they reasoned that sometimes it was stressful, lonely, and frustrating to deal with racial and gender stress alone without a partner. These are the times the participants said they needed a stress hotline. Besides, participants said it would be great to hear a voice on the other end who knows a Black woman's struggles, empathize without judgment, and provide support with talk therapy. The participants also mentioned having access to a life coach who could guide them through many life challenges. All the participants made it clear they did not want to see a psychiatrist or a shrink due to community stigma.

Participants' quotes on the social support theme were as follows:

Kecia – "Shame is a key barrier; I am embarrassed even to admit I am weak and needing counseling or something like that. We were taught that we garner strength from God, and the church is always there to provide social support and spiritual guidance. However, even my church does not condone mental health therapy, and I sometimes feel that my faith is being called into question if I seek extra help."

Aisha – "Having support group meetings to talk about our issues and gain feedback and pointers to deal with stress. It would also be nice to have a person call me and talk when I feel those blues. That way, I do not have to avoid or repress my stress."

Nia – "I cope with stress by staying connected with my life coach, especially when stressed. I go fishing, and I also journal."

Tanya – "When I am stressed, I clean, I sing praises, and I pray through it. That helps me kind of deal with stress."

Raven – "We want to be healthy and fit, but many Black women do not know how to reduce obesity. No matter how much I exercise or eat right, it does not always take the weight off because I think my weight gain is from stress. Maybe a community-based solution for stress would be helpful."

Latifa – "I suggest counseling or education on proper exercising. Folks do not like all this dieting talk. I would also prefer to have a hotline I can call. Somebody I can talk to when I feel down and out."

Ebony – "As Black women, we talk most to our friends and family. Unlike women of other cultures, we do not have a culture of speaking to therapists or psychiatrists. That would make me appear weak."

Deja – "Sometimes, life throws a lot of things at you that will stress you out; especially as an AA woman, I deal with some hurt and pain from racial discrimination, but I cannot let it get me down. I pray myself out of it because that is what I do."

Imani – "I call a friend and talk through my issues. It would be nice to have a support group for us single mothers to receive no-cost help with diet, exercise, and stress management."

Asia – "I manage stress through my mindfulness practices such as yoga, meditation, and monthly massage sessions."

Gwen – "One self-care way I cope with stress is properly detoxing. I remember learning that stress hormones stay within the female body almost twice as long as males. So, the stress hormones enter the male's body, and the body would get rid of them within 24 hours. For women, it takes about 48 hours."

Jada – "I meditate. I read scriptures. I listen to hymns, old-fashioned hymns, and it helps me with stress. I also think major programs like YMCA membership, stress hotline, credit counseling, and financial management help should be provided free."

Catika – "We need to end White privilege and treat everyone as equal, that in my view will reduce stress and improve the health of AA women."

Discrepant Findings

The purpose of this study was to explore the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among AA women. Analysis of the data offered conflicting messages revealed by the participants during the interviews. The first discrepancy was seen in a race, ethnicity, and identity-related conflict. Many of the participants addressed their family of origin by tracing their roots to slavery. They did not trace their roots back to Africa. Some of the women wanted to be identified as Americans without any pejorative hyphenated label.

Another conflict is evident in the demographic data. One participant with the least education (Bachelor's degree) among the participants, a single mother, was the highest-paid participant earning \$90 000 and had the highest BMI of 46.4. The social determinants of health, including income level, education, and socioeconomic status, are protective factors against obesity for White than AA women. All the women interviewed expressed body image satisfaction. Although they were obese, they did not call themselves obese. The use of euphemisms, such as "big-boned," "big beautiful woman," "thick," and "full-figured" instead of "obese," might indicate an uneasiness with the body size or perhaps how society addressed it. The participant's health beliefs about their BMI and health status were at odds. They claimed that although they are "full-figured" women, the weight status did not mean they are unhealthy. Body positivity and fat acceptance are great emotional factors in self-efficacy, but obesity remains a deadly disease.

Moreover, there were conflicting messages in addressing factors that inhibit physical activity participation. Some participants pointed to access to the exercise facility

as a barrier. Others stated that the challenges of increased physical activity participation are primarily availability and affordability. In some instances, the participants expressed frustrations that the coronavirus pandemic social distancing and lockdown mandates made it harder to engage in physical activities. The participants also expressed that finding facilities that provided childcare services for patrons while exercising was a struggle. When that was not the case, the participants stated that the barriers shifted to laziness or that exercising was the least of their priorities amidst daily life stress.

The participants were insightful about their knowledge of the recommended diet and physical activity level but struggled to eat healthier or exercise. Instead, they admitted eating comfort food to combat daily stress and hide emotional pains. The participants acknowledged the impact of racial minority and gender stress on their health and the necessity to seek help through a stress hotline. However, they were still against talking to a psychiatrist due to mental health stigma; instead, they preferred like-minded friends or other Black women who understood their plight.

Navigating the impact of racial minority and gender stress on obesity was complex for these participants. On the one hand, they were acutely aware of the racial and gender-based discriminations, wanted to lead the fight against the injustices, but shuddered at the toll it had on their health. Similarly, the participants demonstrated insight regarding how stress affected their health but admitted to internalizing the pains of racial minority and gender stress. Most of the participants identified as strong Black women as a morale booster, but others feared the label was weaponized to deny the effects of systemic racism or the needed help with stress coping programs.

It was evident that the participants' dietary practices, physical activity participation, and stress coping strategies understated their knowledge of stress and obesity-related conditions. All the participants expressed a preference for soul food and were open to healthier ways of preparing it. Only a few currently exercise or met the recommended physical activity guidelines, and a majority practiced negative stress coping strategies. It was common among the participants to use avoidance, denial, repression, and changing their authentic self to fit into White spaces as a stress-coping strategy. The participants fiercely defended their curves with Afrocentric vigor, welcomed support with increased physical activity to lose weight, but truly wanted help dealing with the daily experiences of racial minority and gender stress.

Summary and Transition

The participants in this study struck a bit of nuance by tracing their family of origin only to the days of slavery with little reference to their African heritage. They were educated, had thriving careers, and earned middle income. Still, they had a high BMI, obese, and not immune to the health risk associated with racial minority and gender stress. The participants in this study narrated their lived experiences of sociopolitical and systemic racism stress. They recalled how being labeled pejoratively made them the target of discrimination. The participants noted the stress associated with the heightened fear for their lives, institutional mistrust, and hypervigilance impacted their health. The participants addressed the importance of a healthier diet and increased physical activity participation but believed that dealing with everyday racial and gender stress was their greatest challenge.

Addressing the lingering issues of diet and physical activity participation, the participants admitted to a poor diet and little or no exercise. They demonstrated a preference for their heavier body size, expressed Afrocentric sentiments in defense of their body image, and adopted euphemisms such as full-figured or BBW to confirm the narrative of perceived higher body image satisfaction than White women. The culture of AA culture was narrated as permissive to weight gain, and that AA men love curvier AA women's physique. Stress coping mechanisms meant deferring to their Christian faith, internalizing or avoiding the trauma of racial minority and gender stress.

Chapter 5 includes an interpretation of the findings, limitations of the study, recommendations for future research, implications for positive social change, theoretical and methodology implications, and conclusions.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to explore the lived experience of subclinical racial minority and gender stress as significant factors impacting obesity among AA women. Research studies have shown that AA women are 0.58 times more likely to be obese than White women, resulting in an obesity prevalence of 43% than 25% among White women (Flhealthcharts, 2020). Extant data from researchers link subclinical stress to obesity and obesity-related conditions such as stroke, hypertension, and diabetes (Flhealthcharts, 2020; Ogden et al., 2016; van Rossum, 2017). The 13 women who met the inclusion criteria were interviewed using a phenomenological approach. Data was collected through a one-on-one semi-structured interview with open-ended questions. The participants in this study discussed their lived experience of racial and gender stress impacting obesity. The interviews were audiotaped, transcribed, and analyzed with a modified Colaizzi's 7-step data analysis process. The results yielded 16 subthemes framed into eight major themes: (a) sociopolitical anxiety, (b) systemic racism, (c) otherness identity, (d) hypervigilance, (e) culture, (f) unhealthy habits, (g) avoidance, (h) and social support.

The participants had insights into the link between racial minority and gender stress and obesity. The stories portrayed they were discriminated against, victimized, and problematized. These experiences happened within social, professional, media, commercial, and institutional spaces, which impacted their obesity. The participants identified cultural, life challenges, and personal unhealthy habits as barriers to physical

activity participation. In contrast, avoidance by defiance and negative reinforcement and social support via spirituality and stress hotline served as risk or protective factors.

Interpretation of the Findings

In this qualitative study, 13 obese AA women were recruited as participants through a posted flyer, prescreened with a questionnaire, and interviewed in-person or over the phone using an interview protocol. The participants explored the lived experiences of subclinical racial minority and gender stress impacting obesity. Findings from the study revealed that participants had insight into obesity as a complex disease, making the treatment challenging, nuanced, and just as complicated. They identified a combination of contributory factors such as dietary patterns, physical activity, medications, genetics, psychosocial stress, and enabling environments. The in-depth interviews helped the participants explore obesity management options, including lifestyle approaches to diet and physical activity participation. Still, the emphasis was on addressing the individual and community trauma from racial and gender stress contributing to obesity.

Interpretation of these results should consider the political and social landscape in which the interview was conducted. Across the country and in Tallahassee, there were the "twin pandemics." The first being the protest against police brutality, and the other the Coronavirus pandemic. AA women told the experience of racial injustices and were actively engaged in the social justice protest. The extent to which the women's responses were affected by the recent racial incidents was not specifically measured in this study.

The sociopolitical environment surrounding many nationally televised racial incidents may have affected and sensitized AA women to racial minority concerns and fears.

The study participants gave several examples, such as the Rodney King's brutal beating 30 years ago by the police in Los Angeles and the police killing of Eric Garner in 2014 in New York. Sandra Bland's arrest and death in police detention in 2015, or the killing of George Floyd in the street by Minneapolis police in 2020, all weighed heavily on the women's minds. The AA women specifically mentioned Sandra Bland, George Floyd, and Breonna Taylor, an emergency medical technician, killed in her bed in Louisville, Kentucky, by the police. These racial issues might have triggered the feelings of hypervigilance, the anticipation of racism, and fears for their lives based on their race and gender as AA women in a race-conscious society.

I presented the participants with interview questions to explore their lived experience of racial minority and gender stress. Participant responses were transcribed, and themes and categories were developed. As I analyzed themes, the participants' insights provided the building blocks for constructing answers to the four research questions.

RQ1: What lived experience of racial minority and gender stress exists in a sample of obese AA women?

The themes of sociopolitical anxiety and systemic racism emerged. Sociopolitical racism findings were based on participants' lived experiences of exclusion, relegation, insults, and the gender pay gap. Subjection to selective enforcement of rules and a barrage of negative media images, dehumanization, and over-sexualization, which led to

stressful code-switching for survival. The findings of systemic racism were based on the participants' racial discrimination experience in the criminal justice system, employment, housing, and healthcare. Participants also recalled everyday forms of racism, like "shopping while Black," consumer, and tableside racism experiences.

RQ2: How do the lived experience of racial minority and gender stress impact obese AA women?

I generated an otherness identity and hypervigilance as themes. Findings of otherness identity were based on participants' experience of being labeled angry Black women, being told to go back to Africa, or being stared at gratuitously. Other findings included being considered low intelligence persons, devoid of feminine qualities, being sexually promiscuous, and having superhuman strength. Findings of hypervigilance were built on experiences of covert racism, racial slurs, and racial profiling. Other findings were an anticipation of racism, White privilege, police brutality, and fear for safety.

RQ3: What factors promote emotional eating and inhibit physical activity participation among obese AA women?

The themes of culture and unhealthy habits emerged. The culture theme was based on participants' experience of family food rituals, soul food, nutritious food availability, and affordability. Additional findings were obesity metaphors, single motherhood challenges, knowledge of health risks, access to exercise facilities, and hair care issues. Findings of unhealthy habits were shown as internalized oppression, repression of feelings, emotional eating, and sedentary lifestyle.

RQ4: What coping mechanisms exist to reduce the impact of racial minority and gender stress on obesity?

I generated avoidance and social support as themes. The avoidance findings were based on participants' experiences of negative reinforcements, defiant contentment, euphemisms and denial, claims of being "obese but healthy," obesity apologetics, safety in plus size, and curve appeal. Social support findings were seen in spirituality, mindfulness practices, self-care, group dancing, stress hotline, talk therapy from friends, life coach, and counseling. In this study, I interpreted the findings based on how they confirmed, disconfirmed, or extended the knowledge of stress-linked obesity by comparing the findings to peer-reviewed literature in the context of the SEM and MST theoretical frameworks.

In response to the first research question exploring racial minority and gender stress experiences, the participants narrated stories related to sociopolitical anxiety with covert racism in social and professional settings. The discriminatory experiences ignored their accomplishments as professional women, denied them full rights to work, diminished, and resigned them to respectability politics. For example, Raven stated,

As a Black woman, I work twice as hard to get the same thing or half as much as a White woman doing nothing. Also, no matter what kind of success a Black woman attains, athletes, celebrities, academics, or politicians, we all have the same problem, so long as your skin is black, you will be stressed. Still fat and do not have a happy life.

Other participants expanded on the sentiments expressed by Raven. For example, Imani talked about the microinvalidation and diminishing of Black women by disparaging them as "affirmative hires." Another participant addressed gender discrimination in hiring practices. Aisha was denied a job in automotive sales because the hiring manager felt a woman could not sell automotive parts. Race, professional development, and leadership opportunities were discussed. Kecia narrated being denied several promotion opportunities and bullied due to her skin color.

These findings were consistent with theories espoused by existing literature on race, gender, and sociopolitical environment on obesity in AA women. Richardson and Brown (2016) opined that dark skin and other minority attributes constituted an appearance stigma leading to racial asymmetry, perceived discrimination, and obesity. Gender differences moderates employment and pay gap stress (Gould et al., 2017), fostering more stress and obesity in women than in men (Bidulescu et al., 2013; Devaux & Sassi, 2013). Aside from this, occupational and hostile workplaces create a supportive environment for microaggressions/invalidation and discrimination against AA women (Alterman et al., 2013; Holder et al., 2015; Keith et al., 2017).

In this study, the participants narrated marginalization, problematization, and victimization instances of systemic racism. The events occurred in employment, housing, healthcare, shopping, restaurants, and the criminal justice system interactions. For example, Imani addressed systemic racism in housing with a story of applying to rent a house. Upon learning she was an AA woman, the landlord turned around and said the house was no longer up for rent. In dining while Black experience, Deja recalled going to

restaurants with White coworkers where the wait staff never served her or asked what she would like first and treated her as a nuisance when asked for something. Deja was the last person to be served, no matter where she sat at the table. The above examples reiterate the literature where Black women are denied housing in places they could afford and given poor service at restaurants (see Cunningham et al., 2013).

Similarly, participants addressed implicit bias in healthcare. For example, Jada expressed feeling deflated when the dentist told her that "you people" do not care for their teeth. These findings were consistent with the literature review theories that AA women were judged as a race with group meta stereotypes rather than individuals (see Jerald et al., 2017; Powell et al., 2016). Researchers suggested that AA women were viewed as "pain seekers," prescribed them fewer pain medications, and faced with anti-fat, pro-White implicit bias linked to poor patient-provider interactions and health outcomes (FitzGerald & Hurst, 2017; Hall et al., 2015).

The participant findings and literature review indicated that the systemic racism experience in employment, housing, healthcare, and restaurants was affected by the SEM's organizational level (see Bronfenbrenner, 1979; Tehrani et al., 2016). AA women's sociopolitical anguish follows the disrespect, insults, and denial of the full right to work benefits. The ordeal correlates to the MST social causation distal stress explaining minority groups' experience of rejection, prejudice, and discrimination (Hoffmann et al., 2019; Meyer, 2003).

The second research question addressed the ways lived experience of racial minority and gender stress impacted AA women. Findings revealed that AA women were

labeled with an otherness identity, problematized, and victimized, leading to the adoption of heightened sensitivity for survival. Nia mentioned the seemingly mundane but important subtle differences when people described her with a group identity as an AA woman in contrast to a White woman addressed personally as Jane, Mary, or Mrs. Jones. A relic of an ugly racial past is the use of slurs to reference and demean AA women. Kecia narrated an experience at a shopping mall where White teenagers called her racial slurs like "monkey," "thick lips," "fatso," and the "N-word." Dehumanizing and likening AA women's hair, nails, and makeup to Jezebel or the Sapphire caricature created a prejudiced and biased environment.

Participants voiced their feelings about actions that discounted AA women's opinions while White women were validated. If an AA woman confidently states an opinion, exerts her rights, and demands an answer, she is branded an angry Black woman. In contrast, a similarly situated White woman is considered "passionate." Raven observed that her opinions were ignored, and she was branded an "angry Black woman" for expressing the same sentiment that White women said without judgment. AA women are followed around in stores and are often suspected of shoplifting. Raven recalled being moved to tears when confronted by a store security guard who told her she was being followed because "You people" always shoplift. The comment made her feel less than 3/5th of a person. The participants broadly associated the effect of branding AA women as thieves, dishonorable, and criminals as sources of toxic stress.

Living with the burden of expectation bias and under the suspicion of possessing a zombie-like strength synonymous with a superwoman schema is a challenge for AA women. Ebony opined,

Dealing with racial discrimination puts a lot of pressure on me, and I think my health and well-being take a back seat to everything. Like the superwoman schema where they say an AA woman is expected to be the say-it-all do-it-all person. Yeah, right. When there that much pressure to perform every time, something suffers. I push off exercise, and I do not have time for self-care.

Stripped of their individuality, respect, and criminalized, AA women are an easy target of White privilege assaults, racial profiling, and police brutality, leading them to fear for their safety.

The #Karen phenomenon has gained national infamy, with White women using White privilege to call police on Blacks occupying legal spaces. Asia lamented that she lived in fear or anticipation of racism daily, afraid to enjoy the condo amenities. Similarly, Jada expressed panic if she left her condo and went down the elevator to throw her trash away without carrying her driver's license, worried a White person might call the police on her. To adapt, AA women have embraced the imposter phenomenon playing the stressful respectability politics by "acting White," code-switching, and not living their authentic Black personhood for fear of discrimination.

Catika admitted to praying daily before living home to survive a potential encounter with the police. Although her car and driving records comply, still, she feared being guilty of having Black skin and often that it is all it takes. The participants feared

that laws are selectively applied to Blacks by the police arrest powers, denied bail while awaiting trials, and given long prison sentences. Kecia lamented that the second amendment right was not for Black people. She is legally licensed to carry a gun. Still, she fears being killed by a police officer who would claim she had a gun ignoring her right to carry one.

The study's findings were consistent with the existing literature on self-reported psychosocial stress linked to inflammation, increased BMI, and obesity. Researchers have agreed that stress is linked to somatic, psychosocial, and health behaviors (Cardel et al., 2018; Ford et al., 2016; Gianaros & Wager, 2015). Stress-linked obesity was associated with slavery and racism (Assari et al., 2018), group stereotypes (Jerald et al., 2017; Settles et al., 2010), and heightened sensitivity (Lee & Hicken, 2016; Powell et al., 2016). Other findings were superwoman complex, vanilla self, respectability politics, and impostor phenomena (Pitcan et al., 2018; Woods-Giscombé, 2010).

The participant findings and literature review indicated that the participants' experience of otherness identity and hypervigilance was situated in the SEM's Individual and policy/enabling environment levels (see Bronfenbrenner, 1979). AA women's race, gender, and the policing policy environment interacted to create the stress experienced (see Bryant et al., 2015). Experience of otherness identity and hypervigilance fits within the MST proximal stress of anxiety, negative feeling about group membership, and heightened sensitivity. Prejudice and discrimination correlate to MST distal stress. Repeated exposure to racial minority and gender stress due to an otherness identity and

hypervigilance caused cumulative wear and tear (McEwen, 1998; Tan et al., 2017) and weathering deterioration in AA women (Geronimus, 2001; Thomas et al., 2019).

Research question number three examined the factors promoting emotional eating and inhibiting physical activity participation among obese AA women. Findings revealed that culture and unhealthy habits were influenced by sociopolitical and systemic racism. Stress modulated food choices, emotional eating, and physical activity participation. The AA women in this study maintained closely-knit families intricately linked to food rituals for nourishment and celebrations, buffeted by the history of slavery and the lingering effects of racism. The women had insights into the recommended group food servings and physical activity guidelines for Americans. The participants acknowledged the connection between a healthy diet, physical activity participation, and stress-linked obesity. Like others, Gwen admitted to not exercising at all, even though she is aware of the importance of engaging in physical activity at least three times a week.

Several participants tried unsuccessfully to lose weight. They presented a high self-reported body image satisfaction, a permissive culture for curvier women, with little interest in present or future structured exercise. The stories told about culture's influence on the diet and physical activity highlights the historical and sacred role soul food played in the AA community. All participants recalled growing up eating soul food and continued the tradition for cultural pride. Ebony's list of soul foods was lots of fried foods, chicken, breaded pork chop, and baked chicken with heavy gravy. Latifa surmised that food was cultural and a natural part of AA women's lifestyle, which she was willing to drive the extra mile to find authentic cuisines. Simultaneously, many offered healthier

ways of preparing soul food from fresh, healthy ingredients and adding more fruits and vegetables. There were agreements on incremental changes such as portion control and earlier mealtimes.

The participants' barrier-related insights were the strong Black woman persona, beliefs that Black does not crack, offering resilience, and internalized repression of stress with negative consequences. Latifa stated,

When I am stressed, I do not eat right. Stress makes me crave sweets and comfort foods to make me feel better. Then, I do not have the desire to exercise. I am too worried about the stress that I do not have time to pamper myself, look beautiful, or want to go out of the house. I know that throws my cortisol level out of whack, which makes me gain weight.

Other participants expressed the dilemma of being a "strong Black woman" with mounting stress. Kecia expanded on her pride of being a "strong Black woman," tenacious, never one to let others see her weakness but admitted that posture adds to stress. Many participants identified the role of stress in appetite dysregulation, comfort food, and sedentary behaviors. Imani, like others, admitted to working seven days a week, suggesting time and motivation were her barriers to exercising. Others held the strong belief that going to the gym for exercise or yoga seemed a Eurocentric engagement not compatible with an AA woman's truth. Examples of additional AA women's challenges were everyday racism, working two or more jobs to make ends meet, single parenthood, and lack of support and encouragement from a husband or partner.

Although availability and affordability issues of exercise facilities were casually mentioned as barriers, many who had access to inhouse gyms and exercise facilities within proximity did not utilize them even before the Coronavirus mandated lockdown further restricted access. Deja candidly reflected she was lazy with exercising. She uses excuses of uncomfortable weather and now the pandemic social distancing rules. Haircare concerns and big-boned folklore tales were challenges. Tanya summed it perfectly that her processed hair, weave, or other kinds of hair attachments were costly and time-consuming. Exercising generates sweat, destroying Black hair, and it was a barrier for her. Other unhealthy habits barriers were living up to the superwoman schema, internalizing oppression, eating comfort foods, and sedentary lifestyles.

The study's findings were consistent with the existing literature on emotional eating and physical activity participation among AA women (see Schneider et al., 2012). Dobal et al. (2017) noted that culture affects AA women's food preparation, diet, and physical activity decisions. Research supports embracing the beauty of culture and soul food without sacrificing health (see Geyen, 2012). Stress affects food choices and health behaviors (Pickett & McCoy, 2018; Steptoe et al., 2018). Hair is a barrier to physical activity among AA women (Joseph et al., 2018; Woolford et al., 2016). Hyperhidrosis related to excessive sweating during exercise destroys Black hair and is a barrier to physical activity participation (Swartling, 2016).

The findings and literature review indicated the participants' experience of cultural factors and unhealthy habits was situated in the SEM's individual, interpersonal, community, and policy/enabling environment levels (see Bronfenbrenner, 1979). AA

women's race, family, support system, and the preventative health policy environment interacted to create a stressful experience (see Baruth et al., 2014). Experiences of cultural influences and unhealthy habits fit within the MST social causation stress of anxiety, negative group membership emotions, and unequal social determinants of health. Repeated exposure to racial minority and gender stress due to cultural influences and unhealthy habits caused cumulative wear and tear (McEwen, 1998; Tan et al., 2017) and weathering deterioration in AA women (Geronimus, 2001; Thomas et al., 2019).

The fourth research question addressed the coping mechanism available to reduce racial minority and gender stress on obesity. Findings revealed that AA women in this study carried the life course burden and pain of minority stress. Ebony sounded on repressing and avoiding the realities of the experience of racial discrimination. Most found racism and gender discrimination to be depressing. Imani concurred,

I am a Black woman with a college degree, two jobs, a good income, and a home. Still, I am stressed because of my race, I am still not considered equal with a White woman, and I cannot escape the racism. You cannot even rest and watch TV without seeing negative media images of Blacks. At some point, I became numb to prejudice and discrimination. Sadly, I have learned to ignore, deny, and not talk about it. I pretend that it is not happening. Who wants to wake up daily knowing the world does not like me, and I cannot get ahead because of my race?

When people experiencing prejudice and discrimination are hurting from personal or community trauma, asking them to focus on weight management is challenging. Findings revealed that few participants acknowledge that obesity was a health issue. The

reasons for the denial appeared to be a defense mechanism. Catika opined, saying she thought obesity is a health issue, but it is also now a rebellion against mainstream media and institutions telling AA women how her body should be.

The participants in this study liked and saw more upsides to their weight status. Being curvy and loving every pound of it was a defiance of the popular Eurocentric mode. Participants viewed their phenotype as a unique AA women's identity being vilified much like full lips and hips that are now embraced by other cultures. Nia suggested she loved her weight gain because it offered her protection against men. Latifa similarly echoed the claim that a larger body frame offered protection against intimate partner violence and commanded respect in the community. There was a widespread acceptance among the participants that a curvier AA women's body offered greater sex appeal for Black men who preferred larger and well-defined body parts.

Findings showed that the participants used obesity euphemisms to describe their weight status. They described themselves with endearing terms and obesity metaphors like "womanly," "pleasantly plump," "curvy," and "big-boned." Deja loved being described as "curvy," "thick," or "BBW." She dislikes being called obese and felt that although she is a "nice-sized woman," she is a "healthy woman." Analysis of the finding suggests that the study participants have insights into obesity and its health implications, howbeit indirectly. Participants decried obesity stigma, adopted the fat acceptance model, and a high self-reported body image satisfaction. In contrast, they showed a low perception of their weight status because their BMI status ranged from obese (30.2) to morbidly obese (46.4). Still, they denied or refused to accept being classified as obese.

Shame emerged as a barrier to physical activity participation, emotional eating, and obesity. Kecia stated,

Shame is a key barrier; I am embarrassed even to admit I am weak and needing counseling or something like that. We were taught that we garner strength from God, and the church is always there to provide social support and spiritual guidance. However, even my church does not condone mental health therapy, and I sometimes feel that my faith is being called into question if I seek extra help.

Raven conceded that AA women want to be healthy and fit. Many do not know how to reduce obesity. Adding that she tried unsuccessfully with diet plans and exercise goals but was unable to lose weight. She is now convinced her weight gain might be stress-induced. The sentiments expressed by Raven reflect a larger problem. Diet and exercise have only yielded marginal results in weight reduction for obese AA women.

Faced with a lack of options, many have held on to obesity apologetics, negative reinforcement from heavysset matriarchs in the family, denial, and defiant contentment. AA women have been told that if they cannot have the body they want, it is okay for them to like the body they have. Tanya summed it up by saying that her grandmother told her that she was a big girl because she is big-boned, not to worry about her weight, and God created her thick. The literature does not support the big-boned and obesity association. Individuals with a larger-than-average skeleton account for 15% of the population. Aside from that, human body weight is carried in soft tissues; being big-boned results in a couple of extra pounds but not obesity (Vorvick, 2018). Self-love and

acceptance are great attributes, but AA women must be provided with effective stress coping strategies.

Findings from the participants in this study showed all required help addressing stress-linked obesity, and they practiced at least one of the following coping strategies: Distraction by house chores technique, devotion to religious practices such as scriptural reading, praise, and worship, and mindfulness practices like yoga, meditation, and therapeutic massages as coping strategies. Latifa suggested the establishment of a stress hotline to help AA women cope with stress. Although all participants were open to community-based stress management programs and physical activities, they rejected the notion of speaking to a psychiatrist because that carried a negative stigma in the community. Participants showed a preference for counseling, support groups, or help from AA life coaches who understand their history, struggles, and challenges.

The study's findings were consistent with the existing literature on stress coping strategies and obesity management interventions among AA women. Age and gender are important factors linked to body size misconception (Lynch & Kane, 2014; Schuler et al., 2008). A strong affinity to racial identity and norms influences body image perception among AA women (Crowther et al., 2010). Addressing society-level intervention, Cyril et al. (2015) proposed engagement to address community trauma to remedy a disadvantaged population's needs.

Additional community-level interventions include addressing the upstream social determinants of health factors (Daniel et al., 2018), workplace employee assistance or wellness programs focused on emotional health, guided imagery therapy, and deep

breathing (Stavrou et al., 2016). Interventions should embrace AA culture replete with soulful music, dancing, healthy foods for family gatherings and celebrations. The cookout line, Harlem shake, the cha-cha line, and shuffle dances are authentic community-based physical activities. Much like the Soul Train music and dance program created by Don Cornelius, a health-focused community-based dance therapy may increase physical activity participation and reduce stress and obesity.

The participant findings and literature review indicated that the participants' experience of cultural influences and social support was situated in all five SEM levels (see Bronfenbrenner, 1979). AA women's race, gender, religion, societal norms, enabling environment all interacted to create stress, influence self-efficacy, and support system availability (see Bagnall et al., 2019; Bauer et al., 2017; Tuso, 2015). Cultural experiences and social support fit within the MST proximal and distal stress of negative group membership emotion, rejection, prejudice, discrimination, and self-efficacy. Repeated exposure to racial minority and gender stress due to culture and social support factors caused cumulative wear and tear (McEwen, 1998; Tan et al., 2017) and weathering deterioration in AA women (Geronimus, 2001; Thomas et al., 2019).

Recommendations for Future Research

There were limited studies that explored the impact of stress on obesity in AA women. I examined the lived experience of subclinical racial minority and gender stress on obesity among obese AA women ages 45-64 in Tallahassee, Florida. Recommendations for future research build on the literature review, strengths, and limitations of the current study. It provides opportunities to construct the same research

under the context of different demographic criteria while potentially serving as a reference, guidance, and ancillary support.

Participants in the study reported higher self-esteem, positive body image perception, and owned their weight gain. Moreover, they took responsibility for being curvy women but blamed systemic racism and gender stress for obesity. The women valued diet and exercise but called for help with addressing their decades-long history of gendered racism. Future research should investigate the link between gendered racism stress and obesity controlling for race, gender, and age groups 21-44. Likewise, examining African and Caribbean Black women not exposed to racial discrimination for stress-linked obesity should also be considered.

Researchers should investigate the link between police brutality, community trauma, and weight gain. As a result, the role of Black churches and mental health counseling as protective buffers against obesity should also be examined. The health-related quality of life for obese versus non-obese individuals with physical and mental health functioning, dating relationships, healthcare costs, and life expectancy variables may also be an area for future research.

Limitations of the Current Study

No obvious research design flaws encumbered this study, but few note-worthy limitations such as sample size and age were noted. I used purposive sampling to select participants with eligibility criteria fitting my research questions to address potential limitations. A limit of this study was a sample size of 13 obese AA women ages 45 to 64

whose experiences of decades of racial minority and gender stress were not representative of all obese AA women in Tallahassee, Florida, younger than 45 and older than 64.

Participants in the eligible age group were acutely aware of the environmental, political, and cultural stress with varying degrees of emotional responses and retrospection. The participants shared a higher community involvement, connection to growing children and elderly parents. Listing other potential stress sources besides gendered racism that impacts obesity, most participants did not mention poverty, unemployment, housing, or poor education. Instead, they identified career development, menopause, and a sense of mortality, presenting unique forms of stress and limitations.

The research setting was another limitation. Recruitment took place in the natural setting where participants lived, could speak openly and honestly. The coronavirus pandemic lockdown rules posed lingering fears limiting some participants to one-on-one phone interviews missing body language cues. The researcher's unintentional bias constituted a limitation that could have affected the research outcome, despite the researcher's steps to address the bias. This study's trustworthiness was established through credibility using data saturation and member checking. Transferability using thick description and participant selection variation. Dependability through audit trail and triangulation. Confirmability using the researchers' reflexivity.

Implications for Positive Social Change

This study carries potential positive social change implications by addressing obesity – a ubiquitous, costly, and deadly disease. Obesity prevalence in AA women is 43% compared to White, 25%, and increases the morbidity and mortality of other

diseases such as stroke, hypertension, diabetes, musculoskeletal disorders, and some cancers (Flhealthcharts, 2020; Ogden et al., 2015). Families suffer obesity-linked infertility and reduced health-related quality of life functioning (Soriano, 2013). Organizations bear the loss of productivity from absenteeism from 3.8% of disability-adjusted life-years, 3.9% years of lost life, and the \$118 billion untimely deaths cost (Ng et al., 2014). Society contends with the added healthcare cost of treating obesity-related diseases and life expectancy rate policies (Arias, 2016).

Positive social change builds on the urgent needs of a community health assessment and identifies strategies and action plans that improve the community's well-being (Cibula et al., 2003; Hodson et al., 2002; Shackman et al., 2002). This study's published results add to the knowledge base of a racial minority group, gender stress, and obesity resources available to AA women, researchers, and clinicians. It provides AA women information to understand obesity risk factors, including stress management and support systems, to dispel the big-boned obesity myth (see Vorvick, 2018). Public health researchers can appreciate how the lived experience of subclinical stress impact obesity among obese AA women. It also provides resources for clinicians who need to be conscious of implicit bias and promote the dignity and worth of obese AA women treated as a BMI number.

This study can bring sustained awareness to stress-linked obesity risk factors leading to a better understanding of the obesogenic environment and the social-ecological lens through which AA women view racial minority, gender stress, and obesity. Positive social change leads to individual growth, promotes cultural values and community

development. This study can amplify the AA women's voices requesting culturally appropriate obesity intervention programs beyond the usual diet and physical activities recommendations.

Positive social change involves actionable steps that improve the individual, community, and societal development. As an imperative, this study adds to the voices calling on policymakers, public health practitioners, clinicians, and community stakeholders to declare and treat racism and discrimination as public health problems that demand an urgent response. Secondly, this study encourages clinicians to prescribe counseling and behavioral therapy for obesity management as medically indicated treatments.

Obesity disproportionately affects AA women. Any viable intervention program should seek culturally appropriate solutions to mitigate racial minority and gender stress. Such interventions should incorporate Afrocentric themes such as people, music, dance, healthy foods, and a celebration of the African American community. A volunteer group of prominent AAs from all walks of life in a targeted public health campaign using social media, TV, and radio messaging to address stress-linked obesity and stress coping strategies can produce positive health outcomes.

Theoretical Implications

The SEM and MST theories guided this study that explored the lived experience of 13 obese AA women, ages 45-64, their identities, community relationships, and connections to the society impacting obesity. Bronfenbrenner (1979), SEM describes human development, eco-systems, individuals, and their natural environment. The link

shows participants were nested and affected by the individual, interpersonal, community, organizational, and policy-level factors (Tehrani et al., 2016). At the individual level, the participants identified race, gender, and self-efficacy factors, which impacted obesity, and were modified by the environment. Family relationships, peer interactions, and support systems shaped identities. They determined AA women's reaction and stress coping skills at the interpersonal level. At the organizational level, community organizations like the churches caused or mitigated stress. At the community level, societal norms and social networks or the lack of them controlled stress and obesity. To the participants, federal, state, and local agencies created or limited the enabling environment for stress-linked obesity at the policy level.

There are two forms of MST: Social selection and social causation (Meyer, 2003). Social selection describes an inherent gene defect, making Blacks an inferior race (Dohrenwend, 2000). In contrast, social causation describes life course exposure to poor social determinants of health, prejudice, and discrimination linked to stress and poor health outcomes (Hoffmann et al., 2019). The social selection has three constructs: distal, proximal, and a mix of both constructs (Meyer, 2003). Distal stress is where minorities experience rejection, prejudice, and discrimination. Proximal stress involves anxiety, hypervigilance, and negative feeling about minority status (Meyer, 2003). Lastly, the combination of distal and proximal stress impacts health outcomes.

MST is social stress that impacts individuals based on their relationship with others and the environment (Gibbons et al., 2014; Ilfeld, 1977). The participants painted life in a prejudiced and discriminatory society. Next, I examined the lived experiences of

obese AA women with life course repeated exposure to racial minority and gender stress, which may cause inflammation and obesity using allostatic load and weathering stress measures (see Geronimus, 2001; McEwen, 1998). Repeated exposure to uncontrolled racial and gender discriminations exerts wear and tear on the body producing inflammatory responses and a rise in cortisol linked to obesity (Pickett & McCoy, 2018). Similarly, life course exposure to socioeconomic deprivation, political and cultural stigmatization leads to physiological deterioration linked to obesity (Thomas et al., 2019). Racial injustice and inequality are making AA women obese! The SEM theory situated AA women in their environment; the MST theory illustrated the stress-producing interactions measured by allostatic load and weathering concepts.

Methodology Implications

In this study, I used a qualitative research methodology with a phenomenology approach. Qualitative design provided the protocol for exploring the socially constructed realities of the 13 obese AA women who narrated their experience of racial minority and gender stress and the meanings ascribed to their realities (see Creswell & Poth, 2017). A phenomenology approach was used to explore, document, and report on how the 13 obese AA women experienced racial minority and gender stress and how those experiences shaped their view of reality (see Patton, 2015).

Conclusions

The participants in this study owned the individual choices and behaviors that contributed to their obesity. They all identified systemic and other forms of racism against Black women in social spaces as complicit in their obesity. On the one hand, the

participants loved being "big" women, buffeted by a permissive culture, but balked at the label of obesity and bemoaned the risk factors of racial minority and gender stress that contributed to their weight gain. The participants relied on avoidance and negative reinforcement as a defense mechanism, utilized social support, and called for stress management programs as protective factors.

The participants spoke from a broken place after decades of enduring racial minority and gender stress. Still, they beamed with transformative healing, hope, and change on the horizon mantra gleaned from their cultural heritage and faith in God. The participants had the insight that obesity impacts health, while diet and physical activity participation were healthy behaviors. Understandably, they chose to prioritize survival or "living while Black" over concerns of weight gain. Insights from the participants suggested that they can cook healthy meals and stay physically active if desired. AA women took issues with public health expectation of standard Eurocentric body size or BMI. They expressed defiance of society and the media's attempt to stereotype, dehumanize, and over-sexualize AA women's bodies. AA women wanted to be accepted on their terms as beautiful Black women. They wanted help with social programs, policies, and enabling environments that boost equality and nondiscrimination.

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Appendix A: Research Study Flyer

Study Seeking African American (AA) women for a study on the impact of racial minority and gender stress on obesity.

\$25 Gift Card



If you have experienced stress due to prejudice and discrimination because of your race and gender...

Eligibility:

- AA woman
- Age 45-64
- "Overweight, Obese, Big-Boned"
- College degree
- Employed
- Household income of \$42,418 + *

I WANT TO TALK WITH YOU!

About your lived experiences, thoughts, and feelings.

• **Voluntary Participation**

Appendix B: Demographic Screening Questionnaire

Please kindly respond to the following background questions. All responses are for screening purposes only and will be kept confidential. In addition to the primary interview, your answers to these questions will provide an insight into the lived experience of African American (AA) women about racial and gender minority stress and obesity.

1. Are you White, Black, African American, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, or some other race?

- White
- Black or African American
- American Indian or Alaskan Native
- Asian
- Native Hawaiian or other Pacific Islander
- From multiple races
- Some other race (please specify)

2. Are you between the ages of 45 - 64? If yes, how old are you?

3. What is your height in feet and inches?

4. What is your current weight in pounds?

5. Have you attained a college-level education? If yes, what is your highest level of education?

Yes

No

6. Are you currently employed? If Yes, what is your job title?

Yes

No

7. Including yourself and anyone else living with you, what is your combined annual household income?

- Under \$42,418
- Between \$42,418 and \$49,999
- Between \$50,000 and \$74,999
- Between \$75,000 and \$99,999
- Between \$100,000 and \$150,000
- Over \$150,000

8. In which type of housing do you currently live?

- Apartment
- Condominium/Townhouse
- Government housing
- Homeless
- Mobile home
- Single-family house
- Other (please specify)

9. Have you been told by a doctor that you have any of the following medical conditions or mental health disorders?

- Anxiety and depression
- Bipolar disorder
- Cushing's syndrome
- Heart/Kidney/Liver diseases
- Polycystic Ovary Syndrome (PCOS)

- Thyroid disease
- No known diagnosis of obesity-related medical and mental health conditions Other conditions that cause obesity (please specify)

10. Have you experienced racism (prejudice or discrimination because of your race) and sexism (prejudice or discrimination because of your sex)?

Yes (both)

No (neither)

Racism only

Sexism only

Unsure

11. If you have experienced both racism and sexism when required, can you recall any prejudice or discrimination suffered because you are "black" and a "woman"?

- Yes
- No

12. How likely are you to participate in this research if you knew that the study would be strictly confidential?

- Extremely likely
- Very likely
- Somewhat likely
- Not so likely
- Not at all likely

13. How likely are you to participate if you knew that this study would potentially raise awareness about the stress of prejudice and discrimination facing AA women, impacting obesity and quality of life?

- Extremely likely

- Very likely
- Somewhat likely
- Not so likely
- Not at all likely

14. If you knew this research would potentially teach AA women effective stress coping mechanisms to deal with racial and gender-based stress, which allow them to eat healthier and exercise more, would you participate in this study?

- Yes
- No

15. The researcher will reach out to the selected respondents to schedule a face-to-face primary interview for this study. What is the best method to contact you?

Cell Phone Number

Landline Phone Number

Work Phone Number

Email Address

Thank you for your time and cooperation in completing this survey.

Appendix C: Interview Protocol

Introduction:

Hello, and thank you for volunteering to take part in this study. My name is Nosakhare Idehen, and I am a doctoral student at Walden University and the researcher for this study. The purpose of this research study is to explore the *Lived Experience of Subclinical Stress on Obesity Among Obese African American Women*. The lived experience is your knowledge, experiences, thoughts of living with everyday racial minority and gender-based stress, prejudice, and discrimination because of your race as a Black person and your gender as a woman. You were selected because you fit the inclusion criteria of the study. Knowledge gained from this study will allow researchers to understand how cumulative everyday stress impacts obesity among African American women. I guarantee utmost confidentiality, solicit your candid responses, and the permission to audiotape answers to capture and accurately represent your experiences.

Questions:

1. Briefly introduce yourself, your name, place, and the story that describes you.
When was your happiest moment in life?
2. What is the difference between the food you ate growing up and what you are eating now?
3. What kinds of food do you eat to make you feel better when you are stressed?
4. What are the opportunities for recreation and physical activities in your neighborhood?
5. How many times per week do you engage in leisure-time exercise?
6. What do you believe are the barriers that prevent you from engaging in physical exercise?
7. When was the moment that you first experienced discrimination or prejudice because of your race or gender?

8. Describe any experience of discrimination or prejudice while applying for or working at any job because of your race?
9. Describe your experience of discrimination or prejudice in getting housing because of your race?
10. Describe your experience of discrimination or prejudice in accessing and receiving proper medical care?
11. Describe an instance where a restaurant or store staff, while shopping, racially profiled and gave you poor services?
12. Describe an example of an experience where people heaped racial insults at you or called you stereotypical names based on your race?
13. Describe your experience of being discriminated against because you are a woman?

Probing Question: Did your experience of gender discrimination happens more in workplaces or social setting?
14. Describe an experience of any stigma you have faced because people labeled you as a "Black woman"?
15. Why do you think that some African American women do not consider obesity as a health problem?
16. Which of the following best describes you: big-boned, obese, overweight, thick, or others?

Probing Question: How do you think your race and gender as an African American woman contributed to your being _ (big-boned, obese, overweight, thick, or others?)

17. How do you think your gender as a woman adds to your stress?
18. Why do you think an African American woman like yourself with a great education, a job, and median income experiences stress?
19. What are some ways that you think stress causes you to gain weight?
20. How do you cope with stress?

Probing Question: What additional resources are needed to help you cope better with stress and maintain a healthy weight?

Significant Post Interview Comments or Observations: