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Body Satisfaction and Self-Efficacy as a Predictor for Obesity among African American College Women

Sacha Nicole Morris-Dorsey
Walden University

Walden University

College of Psychology and Community Services

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Sacha Nicole Morris-Dorsey

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Dr. Brandy Benson, Committee Chairperson, Psychology Faculty
Dr. Jennifer Rounds-Bryant, Committee Member, Psychology Faculty
Dr. Brent Robbins, University Reviewer, Psychology Faculty

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Walden University
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Abstract

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MA, Walden University, 2010

BS, Kean University & University of Medicine and Dentistry of NJ, School of Health-Related Professions, 2003

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

African American women have the highest rates of obesity when compared to any ethnic group in the United States, and the rates of obesity among this population are expected to continue to increase. In this study, social cognitive theory was used to predict the connection between body satisfaction, self-efficacy, and obesity in 18–24-year-old African American women attending college. The data were analyzed using multiple regression, while controlling for demographic variables, to determine if body satisfaction (Body-Esteem Scale for Adolescents and Adults) and self-efficacy (The Eating Self-Efficacy Scale) predicted obesity among African American women in college. Thirty-three participants completed the survey. Correlations and regression were used to analyze the data. Results revealed that body satisfaction attributions and satisfaction with weight both had a significant negative correlation with body mass index (BMI). Contrary to predictions, self-efficacy was not significantly related to obesity. However, findings suggested more research was needed to determine if self-efficacy correlates with BMI for young African American women. The implications for positive social change in this research are to improve healthy eating behaviors among young African American women. Future research may want to focus on an observational learning approach to study obesity factors among young African American women. African American women acting as a peer network to one another may assist with long-term weight control and goals. From a social change standpoint, preventative measures, and appropriate treatment modalities are major concepts to avoid obesity among young African American women. These proactive measures can be implemented in schools, colleges, and the workplace.

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Chapter 1: Introduction to the Study

Introduction

In this study, I examined if body satisfaction and self-efficacy were predictor variables to obesity for African American college women. Obesity is described as a condition of excess body fat and is relatively arbitrary. It is characterized based on an approximation of body mass index (BMI), which uses a person's height and weight to obtain the BMI (American Heart Association, 2015). In the United States, African Americans have the highest rates of obesity, (46.8% African Americans, European Americans 32.6%, Latino-Americans 42%, and Asian Americans 11.7%); however, the number for African American women is higher than any other ethnic group (Center for Disease Control [CDC], 2018). I conducted a closer examination of young African American college women to understand this phenomenon.

The research regarding the definition of body satisfaction has been used interchangeably with terms such as: *body image* and *body dissatisfaction* (Webb et al., 2014). For the purpose of this research, I defined body image as the satisfaction level African American women in college view their body. Previous research showed that African American women had higher levels of body satisfaction than any other ethnic groups (Capodilupo & Kim, 2013). Self-efficacy is described as a pliable factor regarding the prediction of behavior change within multiple theories and has been applied to a wide variety of health behaviors (Bandura, 1977). Self-efficacy is the key construct for social cognitive theory (SCT). Self-regulation affects physical activity and eating behaviors due to self-efficacy (Annesi, 2018). Self-efficacy is one of the main constructs in the

promotion of health and obesity-related interventions that have influenced diet behaviors and physical activity (Knerr et al., 2016). Self-efficacy is not the same thing as *self-regulation*. Self-regulation, also known as self-regulated learning, refers to self-generated thoughts, feelings, and actions that are prepared and systematically adapted as needed to affect one's learning and motivation. Self-regulation is the strategy for achieving a specific goal while self-efficacy is the belief that one can achieve success with the goal (Baumeister & Vohs, 2016).

My goal for this study was to identify whether body perceptions are predictors for BMI among 18–24-year-old African American women in college. I collected demographic information on all BMI levels to determine if there were any correlations in relation to body satisfaction and self-efficacy. The findings from self-reported measures on body image for African American women revealed that there was a limitation on cognitive factors relating to obesity among young African American women (Boggs et al., 2013).

. In this chapter, I give a brief description of the background information, along with a statement of the problem. I address the purpose of the study and the research questions. In this chapter, I also discuss the theoretical framework of the study, nature of the study, definitions, delimitations, limitations, and the significance of the study.

Background

Opichka et al. (2019) stated that the issue of obesity for African American women stems from problematic eating. In addition to poor eating habits, lack of physical activity is problematic for African American women. Opichka et al. (2019) study revealed that

many of their overweight and obese participants engaged in binge eating and lived sedentary lifestyles. The percentage of sedentary African American women who are obese is 48%; in addition to their sedentary lifestyles, this group has an increased rate of diabetes and cardiovascular disease (Blanks et al., 2016). Although African American women have considerable health issues because of their sedentary lifestyle, this does not prevent this population from having high body satisfaction. The high levels of body satisfaction has worked against African American women because of the lack of motivation to exercise and choosing healthy meals is disregarded by African American women.

Body satisfaction is complex for African American women because of the lack of research on body perceptions and African American women. One of the theories is that African American girls and women in high school and college have a broader and more flexible definition of what beauty is for them and as a result, positive body image is increased.

According to Joseph et al. (2016), findings from their study conducted on obese and overweight African American women in college revealed that self-efficacy and outcome expectations resulted in motivation for the participants to engage in physical activity. Joseph et al. (2016) theorized that with technology growing at a rapid pace and research focusing on a younger generation, the speculation is that this will aide in increasing self-efficacy skills for overweight African American women. According to SCT, the stronger an individual's self-efficacy and outcome expectations, the more likely they will have success with physical activity programs (Bandura, 1977).

Problem Statement

The number of instances of obesity is growing among young African American women ([CDC], 2018). However, for young African American women who consider themselves a healthy weight, but are obese, the outcome is unhealthy eating habits and increased rates of cardiovascular diseases. However, the definition of obesity is complex. Previous researchers have suggested that BMI charts are too restrictive with BMI measurements. Strings (2015) proposed that the cut-off of 30 for the obese category is too stringent. Previous researchers suggested that there needs to be a closer examination of the underlying factors for obesity in African American females entering into early adulthood (Tennant, 2016; Walker & Gordon, 2014).

Findings have indicated that young African American women have high body satisfaction; however, researchers stated that socioeconomic, education, and traditional practices affect obesity and body perceptions for this population (Johnson & Wesley, 2012; Joseph et al. 2016). The limitations in the research for young African American women lead to misconceptions about body satisfaction. Vadeboncoeur et al. (2015) revealed that freshman weight gain affects nearly two thirds of incoming freshmen. Therefore, I limited research to young African American women between the ages of 18–24 in a college setting.

Purpose of the Study

The purpose of this quantitative study was to determine if the independent variables, body satisfaction and self-efficacy, as measured by BMI, predict the dependent variable, obesity, among 18–24-year old African American women in college. I chose

African American women in college between the ages of 18–24 for this research because of the increased obesity rates and limited research for this population. The complexity of the age group 18–24, exiting puberty, and entering early adulthood, led to a multitude of influential factors. This in effect caused increased rates of obesity for African American women. By understanding how body satisfaction and self-efficacy relate to obesity in this population, I increased health awareness for African Americans.

Research Questions and Hypotheses

Research Question (RQ1): Does body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults predict obesity as measured by the BMI among African American women ages 18–24 in college?

Null Hypothesis ($H_0$1): Body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults is not a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Alternative Hypothesis (H_a1): Body satisfaction as measured by Body-Esteem Scale for Adolescents and Adults is a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Research Question (RQ2): Does self-efficacy as measured by the Eating Self-Efficacy Scale predict obesity as measured by the BMI among African American women ages 18–24 in college?

Null Hypothesis ($H_0$2): Self-efficacy as measured by the Eating Self-Efficacy Scale is not a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Alternative Hypothesis (H_a2): Self-efficacy as measured by the Eating Self-Efficacy Scale is a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Theoretical Framework

I used Bandura's (2001) SCT as the theoretical framework for this research. SCT is used to explain how people obtain and maintain behavioral patterns while providing the basis for intervention strategies. Originally, known as the health belief model, later, re-labeled social learning theory (SLT) and is currently known as SCT. SLT theory is used to emphasize the importance of modeling the behavior(s), attitude(s) toward the behavior, and the emotional responses of others (Bandura, 1977). SCT includes a focus on self-efficacy and locus of control, and researchers use it to explain, predict, and influence behavior (Rosenstock et al., 1988). The theory was originally based on four perceptions as the main constructs of the model: perceived seriousness, susceptibility, benefits, and barriers.

SCT now includes cues to action, behavioral capability, outcome expectations, self-efficacy, self-regulation, social support, and motivating factors (Bandura, 2001). These new constructs were added to the theory to address self-efficacy and body satisfaction. I used this theory to understand body satisfaction and self-efficacy and any predictors to obesity for 18–24-year old African American women in college. I used SCT and these new constructs to address why this population has poor eating habits and patterns that lead to increased obesity rates. SCT has been the framework for weight

management programs because of the constructs of self-efficacy and self-regulation (Tennant, 2016).

Nature of the Study

In this study, I used a quantitative research methodology with simultaneous multiple linear regression analysis to examine whether body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults and self-efficacy as measured by the Eating Self-Efficacy Scale correlated to obesity as measured by BMI among African American women ages 18–24 in college. The criterion variable for this study was obesity. A nonexperimental approach was better suited for this research due to the inability to manipulate variables. Initially, the sample was going to be 100 African American female participants. I believed that the sample type was more efficient and would better protect the anonymity of the participants. However, after conducting a priori analysis, I completed the calculations using G*Power 3.1.9.4 and the power of the study was set at .80, a two-tailed alpha level was set at .05, the effect size was set at .15, this yielded a sample size of N=55. However, due to restrictions in place due to the COVID-19 pandemic, the partner university was not allowing anyone on campus, which made it difficult to collect data. Therefore, I received permission from committee members and partner university members to change the number of participants from 55 to 42. I used demographic questionnaires were used to obtain the participant's age, weight, and height; this information was needed to obtain BMI measurements. Body satisfaction was measured by the Body Esteem Scale for Adolescents and Adults (BESAA) and self-efficacy was measured by the Eating Self-Efficacy Scale (ESES). The psychometrics of

these instruments are discussed further in Chapter 3. I examined the data using a multiple linear regression analysis.

Due to the nature of the research questions and the varied work schedules of the participants, data collection from an online survey site was the best option to obtain the data required. By using an online data collection, participants were able to fill out the demographic information and other assessment tools at their convenience and maintained their anonymity. The information from this study may be used to develop effective coping strategies needed and prevention programs to decrease obesity among the African American population.

Definitions of Key Terms

African American: People of African heritage, inclusive of people with descendants from Africa, African Americans, and African Caribbeans who reside in the United States (US Department of Health and Human Services, 2019).

Behavioral capability: Behavioral capability is a person's ability to perform specific tasks based on his/her prior knowledge and the required skills needed to complete them (Bandura, 2001).

Body dissatisfaction: Body dissatisfaction is when one possesses an ideal body image that differs from one's actual body image; this discrepancy leads to body dissatisfaction (Webb et al. 2014).

Body Image: Body image is the concept of self. It is the perception that one has of their physical self, thoughts, and feelings that result from that perception. The feelings

towards one's body image can be positive, negative, or both and are influenced by one's individual and environmental factors (Cash & Smolak, 2012; Webb et al., 2014).

Body Mass Index (BMI): Body Mass Index is the numerical value of one's weight in relation to one's height. This is calculated by dividing one's weight (pounds) by the square of one's height (feet and inches). BMI is used as an indicator of an individual's weight as defined on a scale from obesity to underweight. A BMI of 25 to 29.9 in adults is considered *overweight*, and 30 or more is considered *obese* (CDC, 2018).

Body Perception: Body perception is how one perceives oneself. This is subjective and not a correct representation of how a person looks. Body perception is how one feels about one's body. This relates to how satisfied or dissatisfied one feels about one's shape, weight, and individual body parts (Preston & Ehrsson, 2014).

Body satisfaction: Body satisfaction is described as one's satisfaction with one's body. In addition, compare one's body to other people's bodies (Preston & Ehrsson, 2014).

Expectations: Expectations are the anticipated consequences of a behavior or action. If one expects a positive outcome to an action, then it is more likely that the behavior will be repeated because of the expected positive result. To determine the outcome of behavior change. (Bandura, 2001).

Expectancies: Expectancies is the act of assigning value to the outcomes of behavior change (Bandura, 2001).

Extreme Obesity: Extreme Obesity is having a body mass index over 40 for both genders (CDC, 2018).

Normal Weight: Normal weight is having a body mass index between 18–24; the ranges for body mass index can fluctuate depending upon the height and gender of individuals ([CDC], 2018).

Obese: Obese is having a body mass index between 30-39. The number is the same for both genders ([CDC], 2018).

Obesity: Obesity is a condition characterized by the excessive accumulation and storage of fat in the body. Obesity increases the onset of cardiovascular diseases and other major health problems. ([CDC], 2018).

Observational learning: Observational learning occurs through observation of other people's behavior. The construct is based on the observer seeing another person doing a behavior and the observer mimicking that behavior (Bandura, 2001).

Reciprocal determinism: Reciprocal determinism is the vital concept of Social Cognitive Theory. Reciprocal determinism refers to the reciprocal interaction of an individual and his/her environment. This construct looks at the learned experiences, external stimuli, and the reaction of that individual to his/her environment and goals (Bandura, 2001).

Reinforcements: Reinforcements are either positive or negative, and it is either an internal or external response to one's behavior. Reinforcements are either self-initiated or in the environment (Bandura, 2001).

Self-efficacy: Self-efficacy is the extent or strength of one's belief in one's own ability to complete tasks and reach goals (Bandura, 1977).

Self-regulation-Self-regulation is a series of systematic interventions that are designed two increase one's self-efficacy towards the task. Self-regulation are self-generated thoughts, feelings, and actions that are organized and systematically adapted as needed to affect one's learning and motivation (Annesi, 2018; Bandura, 1977).

Total Daily Energy Expenditure (TDEE): Total Daily Energy Expenditure describes a person's total daily expenditure (TDEE) is the total number of calories a person burns daily. The resting energy is when a person is at rest ([CDC], 2018).

Assumptions

In this research, there were factors somewhat beyond my control. I assumed that the participants answered the assessment tools truthfully. I also assumed that the theoretical framework, SCT, was suited for use to address body perceptions and any connections to obesity for 18–24-year old African American women who attend college.

Scope and Delimitations

The delimitations for this dissertation included participants who were African American women in college between the ages of 18–24. I excluded participants who were not currently enrolled in college, under the age of 18 and over the age of 24, did not speak fluent English, and were male from this study. I excluded survey respondents who did not provide their weight, height, and age from this study. Participants were proficient in English because the assessments were in English. I excluded participants who indicated that they were male-to-female transgender from this study. All participants were enrolled in college at the time they participated in this study. The study was limited to online surveys, Momentive (formerly known as Survey Monkey), in order to maintain

anonymity with the participants. I selected the location of the study due to convenience, time constraints, and individuals who met inclusion criteria. I considered other sites, but the chosen site provided for the maximum number of participants.

Limitations

Generalizations from any results in this study were limited to the following considerations. In this study, I examined a targeted, defined group that included 42 African American women in college between the ages of 18–24. The study was available to African American female college students from Kean University. I did not consider outside influences, such as the Freshmen 15, or living arrangements, that tend to affect the weight of college students. All participants met this study's requirements which included: African American, female, currently enrolled in college, and between the ages of 18–24. One limitation was the potential for bias due to self-reporting. I assumed the participants provided their correct ages, weights, and heights in the demographic questionnaires as this would have affected the results of the BMI calculations. Another limitation were the responses to the assessments that I used in this study. If the participants did not provide honest answers, this would have led to false answers, in turn, skewing the data. According to Creswell (2014), studies that are quantitative, the research trends are based on deductive logical reasoning, using measurable attributes toward human experiences. According to Mertler & Reinhart (2017), this may led to limitations because measuring perceptions and feelings can make it difficult to get precise statistics. I used a multiple regression analysis to examine the presence and strength of the relationships between the independent and dependent variables.

Significance of the Study

In this study, I addressed the under-researched population of African American women in college between the ages of 18–24 and body satisfaction, self-efficacy, and obesity as measured by BMI. African American women have the highest obesity rates compared to their male counterparts, other cultures, and their female peers (Brown et al., 2014). Additionally, I focused more on the psychological factors behind obesity rather than the health-based perspectives that have dominated past research. Based on the studies by Joseph et al. (2017), the self-efficacy and body satisfaction assessments that I used in this study may determine participants' psychological factors about their bodies, exercise habits, and health-related goals. This research resulted in new ideas and concepts for social change regarding obesity and will provide positive contributions to healthier lifestyles for society. The most critical factor was association with body perceptions and how they may affect the BMIs for young African American women. This was crucial because Twarog et al. (2016) discussed how obesity tends to start early in life, sometimes as young as 6-years-old. This research may be used to create prevention programs for youths of all races/cultures. This study was one of the few studies in which the impact of self-efficacy and body satisfaction and its impact on younger African American women that are in college has been investigated; therefore, it has a specific target audience.

Summary

This chapter introduced the problem, the gap in the literature, the theoretical framework, key terms, and included a discussion of the scope, delimitations, and limitations of this study. I discussed that research into body satisfaction, self-efficacy,

and obesity among African American females ages 18–24 in college are both timely and pertinent given the high percentages of obesity among this population and our limited understanding of the psychological factors influencing obesity. In the following chapter, I will further expand on the gap in the literature, theoretical framework, and provide a closer examination of the target population.

Chapter 2: Literature Review

Introduction

Obesity is a health risk and problem that has gained increasing attention in the United States. Obesity rates have risen exponentially over the past 2 decades and one out of three adults in the United States is obese (Walker & Gordon, 2014). While obesity rates in the general United States population are high, some demographic groups are disproportionately affected. In the late 2000s, African Americans had an extremely high rate of obesity ([CDC], 2018). African American women have the highest rates of obesity (Blanks et al., 2016; Cameron et al., 2018). The incidence of obesity among African Americans was 49.5% compared to 34.3% for European Americans, and 39.1% for Latino-Americans ([CDC], 2018).

According to the statistics reported by Brown et al. (2014), African American women had an obesity rate of 58.5% compared to 32.2% for European American women and 41.3% for Latino-American women. Gillen (2013) sought to understand why African American women are disproportionately impacted by obesity; her findings revealed there is needed research for younger generations regarding obesity. In addition, Walker and Gordon (2014) examined the age factor as well as several other factors influencing obesity among African American women, including socioeconomic influences. Chapter 2 contains a comprehensive review of the current literature to explain the importance of researching this topic. In this chapter, I will describe the theoretical framework and how it applies to the dissertation. This chapter will include sections dedicated to studies related to the variables of body satisfaction, self-efficacy, and the assessment tools that

was applied to this research. I examined these body perceptions for any predictors to obesity in African American women ages 18–24 in college.

Literature Search Strategy

I assessed the articles for this research study from the Walden University Library's electronic database. Multiple search engines were used to find the desired articles. The search engines included: EBSCO database located in Walden University's library: Academic Search Complete, Google Scholar, PsychARTICLES, PsycINFO, PsycBOOKS, PsycEXTRA, PsycINFO, PsycTESTS, Sage, and ProQUEST with full text. I used a list of search terms for this research which included: *African American, Afrocentric Theory, Asians, BESAA, Black, BMI, body dissatisfaction, body image, body mass index, body perceptions, body satisfaction, Caucasian, clinical aspect, college, culture, eating disorders, ESES, exercise, female, gender, Latinas, Latinos, men, obesity, physical activity, psychological aspects, quantitative in nature, race, Social Cognitive Theory, SCT, SLT, Social Learning Theory, self-efficacy, self-regulation, socioeconomic status, The Body-Esteem Scale for Adolescents and Adults, The Eating Self-Efficacy Scale, young adulthood, psychological factors, teens, university, White,* and *women.*

Initially, I used search terms related to the general population and obesity. As an example, I used: *obesity*, *African American women*, *BMI, Caucasian, White, self-efficacy, body satisfaction, body image, body dissatisfaction, young adulthood,* and *psychological factors*. The results revealed a number of articles, but none were specific to the independent variables, self-efficacy and body satisfaction, of this study. My second search was multiple combinations and that were intermittently used with each other such

as: *African American, Black, body perceptions, BMI, self-efficacy, body satisfaction, body image, body dissatisfaction, obesity, college, women, depression, young adulthood,* and *afrocentric theory.* The third search combination included the theoretical theories related to this research and were intermittently used with each other: *Afrocentric Theory, SCT/Social Cognitive Theory, African American women, BMI, young adulthood, obesity, body perceptions, body image, body satisfaction, body dissatisfaction, young adulthood,* and *women.* The last search yielded more articles related to this research.

The scope of the literature review was from 1977 to 2019. There were a few exceptions for this literature review. Textbooks that included additional information for the assessments and explained the theories that I used in this research were older than some of the references used in the literature matrix. These references had dates of 1977, 1986, 2004, 2006, and 2007; they included supplemental information for the BESAA and ESES. All studies were relevant to the independent and dependent variables. The results for *self-efficacy* and *body satisfaction* specifically related to young African American women were limited. In order to account for the lack of resources, I used the search terms *body image, body dissatisfaction,* and *body satisfaction* because most of the research used those terms interchangeably with body satisfaction. This was also the case for *self-efficacy*, the term *self-regulation* was added to the search engine and used interchangeably with other search words in this research.

Theoretical Foundation

The theoretical framework that steered this research was social cognitive theory (SCT). SCT is a theory where people act as active agents who are influenced by the

actions of others, individual experiences, and environmental factors on individual health behaviors (Bandura, 2001). In the 1960s, Bandura was the social scientist behind SLT, and SLT was later developed into SCT in the mid-to-late 1980s. Originally, SLT consisted of the following constructs: reciprocal determinism, behavioral capability, observational learning, reinforcements, expectations, and self-efficacy.

Reciprocal determinism is the main concept of SCT. This refers to the reciprocal interaction of individuals and their environments. This construct refers to the learned experiences, external stimuli, and the reaction of an individual to his/her environment and attained goals (Bandura, 2001). Behavioral capability is a person's ability to perform specific tasks based on their prior knowledge and skills to complete the tasks (Bandura). In previous studies, there has been a connection between self-efficacy and body image; however, further research is needed on the connection between African American women and these two concepts (Boggs et al., 2012). Afrocentric theory is the theory that compliments SCT and is specific to African American culture (Asante, 2010; Khokholkova, 2016; Tennant, 2016). There are more details regarding this theory in Appendix B.

Observational learning, a major component of SCT, is an individual modeling a behavior for another person. The construct is based on the observer seeing another person doing an activity and/or task and the observer mimicking that desirable or undesirable behavior/activity. The learner then reproduces that learned behavior in order to achieve maximum results. Reinforcements can be either positive or negative in nature, and it is either an internal or external response to one's behavior. Reinforcements can be self-

initiated or in the environment (Bandura, 2001). Expectations are the anticipated consequences to a behavior or action and assigning value to the outcome of the behavior change. For instance, if one expects a positive outcome to an action, then it is more likely that the behavior will be repeated because of the expected positive result (Bandura, 2001). Lastly, self-efficacy is the person's confidence in performing and completing a task. This construct is based on one's confidence to perform and complete a task, ability to complete the task, individual factors, and environmental factors (Bandura, 2001). Self-efficacy determines whether a person will imitate that observed behavior. Self-efficacy has been found in previous research to be a strong predictor of physical activity and exercise (Annesi et al., 2014; Tennant, 2016).

SCT explains how people obtain and maintain behavioral patterns while providing the basis for intervention strategies (Bandura, 2001). The foundation of SCT is understanding how one's social influences can be affected by one's environment. SCT is based on the idea that learning occurs in a social setting where a person interacts with all aspects of his/her environment. SCT indicates a person's environment to represent people as well as non-living influences (Bandura, 2001). This was one of the driving forces behind this research because this study specifically addressed, 18–24-year-old African American women in college; I researched and collected data in a brick-and-mortar university.

The SCT is based on four perceptions as the main constructs of the SLT: perceived seriousness, susceptibility, benefits, and barriers. SCT also includes cues to action, self-efficacy, and motivating factors (Bandura, 2001). The addition of these new

constructs may contribute to specific findings pertaining to this research, such as self-efficacy. SCT consists of four processes of goal realization: self-observation, self-evaluation, self-reaction, and self-efficacy (Redmond, 2010). This theory may suggest the understanding of the cognitive mentality behind obesity for young African American women. SCT may indicate why these women have certain eating habits and patterns that lead to obesity as well as provide possible intervention strategies. SCT addresses social factors of health and tackles personal determinants.

SCT is pivotal for the promotion of physical activity among African American women, particularly the constructs of self-regulation, self-efficacy, and social support (Joseph, 2017). The usage of SCT shows these constructs to be culturally tailored to address deep-rooted standpoints in African American culture. These specific constructs will contribute to collectivism, ethnic care, experiential knowledge, and kinship (Johnson & Wesley, 2012). The participants in Joseph et al.'s (2016) study revealed that for their culture to stay healthy and maintain healthier lifestyles, it is best to have a strong support system such as family, friends, and other program participants. SCT contributed to defining the problem of insufficient physical activity among African American women. SCT will contribute to new structures for promoting health, risk reduction, and promoting health policy initiatives (Robinson & Jones, 2018). As mentioned previously, this theory focused on the construct used in this research: self-efficacy. Based on research by Annesi et al. (2014), due to African American women being more likely to experience obesity, SCT will address ways for positive weight loss treatment programs and how to provide maintenance strategies for the weight loss, which will be discussed in detail in Chapter 3.

SCT will also present alternate suggestions for people to accomplish successful weight loss by changing their belief systems about obesity (Bandura, 2001).

Literature Review Related to Key Variables

In the following section, I will review the key variables in this research study. First, the literature surrounding SCT, obesity, and African American women in college will be reviewed. Then, I will review the literature concerning body satisfaction and self-efficacy, respectively, and their application to this study. Finally, I will review the demographic variables to provide background as it applies to this research.

Figure 1

Literature Review Matrix

Literature Review Matrix: Variables	Sources
Obesity and African American Women in college	Acheampong & Haldenman,(2013) Aime, Villate, Cyr, & Marcotte (2017) Alvarado, Murphy, & Guell (2015) Antin & Hunt (2013) Awad, Kashubeck-West, Bledman, Coker, Stinson, & Mintz (2020) Awad, Norwood, Taylor, Martinez, McClain, Jones, Holman, & Chapman-Hilliard (2015) Bandura (2001) Blanks, Treadwell, Bazzell, Graves, Osaji, Dean, & McLawhorn, & Stroud (2016) Boggs, Rosenberg, Rodriguez-Bernal, & Palmer (2013) Brown, Hossain, & Bronner (2014) Buckworth (2013) Capodilupo (2015) Cameron, Muldrow, & Stefani (2018) Cozier, Yu, Coogan, Bethea, Rosenberg, & Palmer (2014) Dennis & Dennis (2013)

cont. **Obesity and African American women in college**	Degirmenci, Kalkan-Oguzhanoglu, Gulfiziar, Osman, & Fenkci (2015) Gillen (2013) Gow, Baur, Ho, Chisholm, Noakes, Cowell, & Garnett (2016) Hall, Francis, Whitt-Glover, Loftin-Bell, & McMichael (2013) Hayman, McIntyre, & Abbey (2015) Hicken, Lee, Mezuk, Kershaw, Rafferty, & Jackson (2013) Im, Ko, Hwang, Yoo, Chee, Stuifbergen, Walker, Brown, McPeek, & Chee (2012) Johnson & Wesley (2012) Joseph, Ainsworth, Mathis, Hooker, & Keller (2017) Joseph, Pekmezi, Dutton, Cherrington, Kim, Allison, & Durant (2016) Lippa & Sanderson (2012) Murrock & Gary (2014) Ogden, Carroll, Kit, & Flegal (2014) Opichka, Smith, & Levine (2019) Preston & Ehrsson (2014) Robinson & Jones (2018) Robinson, Shaver, & Wright (2013) Rosenberg, Kipping-Ruane, Boggs, & Palmer (2013) Sanderson, Lupinski, & Moch (2013) Saunders, Watson, & Tak (2012) Strings (2015) Tennant (2016) Tomiyama, Puterman, Epel, Rehkopf, & Laraia (2013) Twarog, Politis, Woods, Daniel, & Sonneville (2016) Vadeboncoeur, Townsend, & Foster (2015) Versey (2014) Walker & Gordon (2014) Wang, You, Lenchik, Nicklas (2012) Westerterp (2013) Whitt-Glover, Goldmon, Karanja, Heil, & Gizlice (2012) Williams & Fruhbeck (2009) Youngs (2018)

Body Satisfaction and BMI **cont.** **Body Satisfaction and BMI**	Annesi, Tennant, & Mareno (2014) Antin & Hunt (2013) Awad, Kashubeck-West, Bledman, Coker, Stinson, & Mintz (2020) Awad, Norwood, Taylor, Martinez, McClain, Jones, Holman, & Chapman-Hilliard (2015) Bucchianeri, Fernandes, Loth, Hannan, Eisenberg, & Neumark-Sztainer (2015) Buckworth (2013) Capodilupo (2013) Cameron, Muldrow, & Stefani (2018) Degirmenci, Kalkan-Oguzhanoglu, Gulfiziar, Osman, & Fenkci (2015) Fallon, Harris, & Johnson (2014) Fisher (2014) Gillen (2013) Gow, Baur, Ho, Chisholm, Noakes, Cowell, & Garnett (2016) Groth-Marnat (2009) Im, Ko, Hwang, Yoo, Chee, Stuifbergen, Walker, Brown, McPeek, & Chee (2012) J.Y. (2012) Cash & Smolak (book review) Kashubeck-West, Coker, Awad, Stinson, Bledman, & Mintz (2013) Knerr, Bowen, Beresford, & Wang (2016) Mendelson, Mendelson, & White (1997) Opichka, Smith, & Levine (2019) Preston & Ehrsson (2014) Robinson & Jones (2018) Robinson, Shaver, & Wright (2013) Sanderson, Lupinski, & Moch (2013) Saunders, Watson, & Tak (2012) Tennant (2016) Tomiyama, Puterman, Epel, Rehkopf, & Laraia (2013) Twarog, Politis, Woods, Daniel, & Sonneville (2016) Vadeboncoeur, Townsend, & Foster (2015) Webb, Butler-Ajibade, & Robinson (2014) Whitt-Glover, Goldmon, Karanja, Heil, & Gizlice (2012) Young (2018)

Self-Efficacy and BMI	Annesi (2019) Annesi (2018) Balani, Herrington, Bryant, Lucas, & Kim (2019) Bandura (2006) Bandura (1977) Buckworth (2013) Carver & Scheier (2002) DegirmencI, Kalkan-Oguzhanoglu, Gulfiziar, Osman, & Fenkci (2015) Fisher (2014) Glynn & Ruderman (1986) Groth-Marnat (2009) J.Y. (2012) Cash & Smolak (book review) Knerr, Bowen, Beresford, & Wang (2016) Murrock, & Gary (2014) Redmond (2010) Saunders, Watson, & Tak (2012) Strachan, Flora, Brawley, & Spink (2011) Tennant (2016) Vadeboncoeur, Townsend, & Fostera (2015) Webb, Butler-Ajibade, & Robinson (2014)

Obesity and African American Women in College

There are numerous factors to consider when trying to understand why obesity affects populations differently, but most importantly young African American females. While it appears that obesity affects people more on an individual basis, this led to the question as to why African American women are more afflicted by obesity than any other population in the United States ([CDC], 2018). Findings have revealed that several factors effect obesity, including biological, psycho-social, socioeconomic circumstances, and cultural factors (Acheampong & Haldeman, 2013; Johnson & Wesley, 2012). Most importantly, this research was geared toward younger African American females (18–24)

in college. As there is a gap in the literature for young African American females regarding body satisfaction, self-efficacy, as a predictor to obesity. More research are needed for young African American women because the onset of obesity for African American women are starting at a younger age. The prevalence of obesity for young African American women needs to be explored further while using the variables, body satisfaction and self-efficacy (Robinson & Jones, 2018).

SCT theory will address women with increasing their physical activity on a daily basis (Joseph et al., 2017). SCT encompasses people's beliefs, attitudes, and environment which in turn guides future research for African American women and obesity. Body image is also described as a person's representation of their body with specifics to a person's size and shape. In a review of J. Y. (2012), Cash and Smolak (2012) explained another perspective of body image is defined as a psychological attitude one has towards one own's physical attributes, this includes physical competence and somatic health as well. There are many explanations as to why African American women's body satisfaction are both positive and negative. One of the reasons is that African American women have more of a positive body image because they have learned to accept different beauty aesthetics that opposes societal devaluation of their appearance. For instance, it is popular in the African American community for African American women to have large buttocks and it has been reported by African American women who are on the thin side to feel left out if this is the case for them. For African Americans, obesity is more subjective rather than what is standard for everyone else in society (Capodilupo & Kim, 2013; Johnson & Wesley, 2012; Tennant, 2016).

Obesity is described as an imbalance of energy ([CDC], 2018; Johnson & Wesley, 2012). While diet and exercise may affect obesity another factor to consider is known as the resting metabolic rate (RMR) or the amount of energy an individual expels while the body is at rest and need to maintain body integrity, may impact the onset of obesity and is important when considering the population of African American women. Johnson and Wesley (2012) observed RMR in a sample consisting of 25 African American women and 22 European American women; all participants were non-smokers, pre-menopausal, were at an average age of 35 years, and had at least 10 menstrual cycles per year. Participants were also inactive and exercised less than once per week in a six-month period. All participants in this study were obese and had BMIs over 34. The results indicated that African American women had 7-9% lower RMRs than European American women (P=0.017, 0.003, and 0.035; Wang, You, Lenchik, & Nicklas, 2012). The resting energy expenditure (REE) was also lower in African American women (1790+/-141 kcal/day) than European American women (1949+/-142 kcal; $p<0.006$).

In addition, Wang et al. (2012) revealed REE was associated with weight loss in body weight and composition in European American women, but not African American women. African American women had more limb lean mass, but less trunk lean mass. Across the research, statistics showed that African Americans, in general, had a higher rate of obesity and that successful weight loss is lower for African American women (Johnson & Wesley, 2012; Wang et al., 2012). In conclusion, Wang et al. (2012) research stated there was a need for younger African American women regarding REE and RMR research, as the current literature was scarce for this population.

Body Satisfaction and BMI

The assumption for African American women when it pertains to body satisfaction is that African American women have high body satisfaction and are not bothered by thin European body images (Capodilupo & Kim, 2015; Sanderson et al., 2013). The explanation is much more complex for African American women and that African American women have always been influenced by body images. The misconception is how African American women handle their role in society regarding body image and obesity. Today, young African American women focus on how much they like their appearance and how healthy they are when they look in the mirror rather than being thin. This compliments Halliwell's (2013) research on media images and body satisfaction. Halliwell posited that women with high body satisfaction are less influenced by media images of thin-ideal internalization.

Another reason for the high level of body satisfaction is that African American women are less likely to be motivated by thinness ideal than European American women due to cultural differences in their communities. This concept reverts to socioeconomic factors, for young African American girls growing up without healthy food stores or the finances to afford healthier foods. The affordability and accessibility to these facilities were limited for African American girls, they developed an adaption to what their environments had to offer during these times (Capodilupo & Kim, 2015; Tennant, 2016).

Sanderson et al. (2013) conducted research on African American women in college between the ages of 18–25. The findings from Sanderson et al.'s research revealed young African American females' rejection to being thin and cultural

differences attributed to their high level of body satisfaction. However, it was dependent upon the demographics of the college (Capodilupo & Kim, 2015; Sanderson et al., 2013). The conclusion was that African American females from an historic all-Black college (HBCU) were more satisfied with their weight regardless of their size than the African American females at a predominately white college (PWC). Also, this age group has complex conflicts with body perceptions and obesity due to their transition from adolescence to young adulthood (Fisher, 2014).

Sanderson et al. (2013) study on obesity and African American women ages 18–25 at an HBCU and a PWC revealed being within a predominately African American community protected these young women from having negative body images. The females at the HBCU felt less body dissatisfaction and need to exercise. Sanderson et al. (2013) findings suggest that females at the HBCU had a higher satisfaction with their body types regardless of whether they were within the normal BMI measurement. On the contrary, African American women at the PWC assimilated into the European body type standards at their colleges (Sanderson et al., 2013). Findings revealed that environmental circumstances affected whether the African American participants had negative or positive body images. The conclusion was that if African American women were able to "see" themselves and subsequently have body image discussions incorporating obesity standards, this will be able to address the obesity dilemma among this population (Brown et al., 2014; Capodilupo, 2015). This was demonstrated by Kashubeck-West et al. (2013) research, where obese African American females in college was a peer network for one another regarding changing physical activity and dietary behaviors.

Tennant (2016) reported that out of the other ethnic groups in her research African American women had the most positive body perceptions even when they were obese. In contrast to European American women, who classify themselves as overweight or obese when they were of normal weight, had the most negative body perceptions. The obesity increase among African American women is body size perception. One contribution to this concept is African American men preferring larger size women and being *thick* is an ideal in African American's physical beauty standards. The concept of *thick* is described as certain body parts on a woman, for example: buttocks and legs, being larger than normal (Antin & Hunt, 2013; Johnson & Wesley, 2012; Walker & Gordon, 2014). The authors also discovered that African American women had fewer occurrences with eating disorders. The reason behind this occurrence may not be exclusive to African American women. African American women's body satisfaction and dissatisfaction stem from many factors related to societal and cultural influences. Kashubeck-West et al. (2013) conducted research on the reliability and validity of body perception instruments used to measure body image in African American females in college. The results suggested that African American women in college have cultural vigilance, critical skills, and education to avoid being influenced by media images that are not culturally validating.

The cognitive processes of how young African American women perceive their bodies need to be further examined to get a better understanding of how obesity affects this population. One major factor influencing body satisfaction and obesity in African American women are media images (Capodilupo, 2015; Gillen, 2013). African American,

and other minority women within Western cultures are influenced by European beauty standards observed in beauty magazines, television images, and billboard images (Asante, 2010; Capodilupo, 2015; Khokholkova, 2016). Constant viewing of European images and European beauty standards in the media may cause African American women to be influenced by European standards of beauty. The lack of representation of African American women in the media will then contribute to African American women's negative perceptions of themselves as they want to have straighter hair, lighter skin, and thinner frames (Asante, 2010; Capodilupo, 2015; Mustakeem, 2008). However, the research conducted by Kashubeck-West et al. (2013) suggested education as being an important influential factor to body perception after viewing media images primarily of European characteristics. This suggests that socioeconomic factors also have an influence on negative or positive body perceptions, for African American women who cannot attend college. (Blanks et al., 2016; Cozier et al., 2014; Hayman et al., 2015; Im et al., 2012).

Previous research has shown that there is a relationship between obesity and a person's satisfaction with their bodies (Hall et al., 2013). However, women who are obese do not necessarily have negative body images. On the contrary, research has shown that there is a disconnect for African American women and how they perceive themselves as opposed to their actual weight size because of the acceptance of having larger body frames (Johnson & Wesley, 2012; Robinson & Jones, 2018; Strings, 2015). African American girls 10-19 years of age, in comparison to their European American peers, had a happier disposition with their weight gain or current weight even if their BMI was in

the overweight or obese categories. However, the number for young African American females whose mothers are overweight and living in poverty are doubled for these young girls (Boggs et al., 2013; Strings, 2015; Tomiyama et al., 2013). In another study, Robinson and Jones (2018) conducted research based on the SCT and the health belief model (HBM), and their findings revealed high body satisfaction, but low weight satisfaction for African American women. The results also revealed that African American women admitted that they did not put enough effort into choosing healthier foods or paying attention to caloric intake.

Body image is present in humans as early as the age of four, which is when a child's self-concept is beginning to develop. Parental restrictions on food intake are starting to occur and peer's feedback is starting to be internalized. By the time children are six years of age, positive and negative concepts about their body image are starting to take place (Fisher, 2014). This may be a factor because two out of three adults are overweight in the home. Children and teenagers are heavily influenced by their parents on how they eat and the amount of physical activity they engage in daily ([CDC], 2018). As childhood development progresses into puberty, self-esteem becomes a major factor and depending upon the development of the child, objectification often leads to body dissatisfaction. Adolescence has emerged as a phase where eating disorders are becoming more prevalent among this age group. This is because the number of teens afflicted with eating disorders are becoming at risk to being diagnosed with disordered eating. During the transition from adolescence into young adulthood, there are many changes taking place with teenager's bodies and thought processes. The brain maturation and body

composition are occurring during this stage and teens are vulnerable to negative body image perceptions (Bucchianeri et al., 2015). Current research validated the need to be thin and how one looks is heavily dependent upon weight. An individual who is not muscular nor thin began to experience stereotypes and the notion is that people who are smaller sizes are more attractive than those who not, which are deemed lazy and insignificant (Capodilupo & Kim, 2015; Fisher, 2014).

Media influences are to blame for this obsession to be thin and creates negative body perceptions for people. Media is a part of people's lives from an early age, children are influenced by desires to have popular toys. Likewise, with teenagers, media influences their desires for the latest fads and fashion. For young girls, as they get older there is a shift from toy desires to their bodies and there is more pressure to adhere to ideal standard of thinness. This is not to suggest that boys are not influenced by media images, however, there is a higher correlation for women and media influences. The dissatisfaction with one's body can be exacerbated if media, family, and peer influences produce negative feelings towards an individual's body (Fisher, 2014).

Cash and Smolak (2012) described positive body image as acceptance of one's own body regardless if they are thin, overweight, or muscular. This concept is applied when an individual is not at their ideal weight. People with high positive body satisfaction are less influenced by what other people, say, or feel about their appearance. Most importantly, individuals with high positive body images correlated with higher levels of physical and psychological health. The results of women's body dissatisfaction (12.4% to 31.8%) have continuously increased over the past several years (Fallon et al.,

2014). Also, one way to increase positive body image is through physical activity. More important, research stated that the outcome between body image and physical activity is positive regardless of which one is the independent variable. Positive body image has been correlated with an overall healthier outlook in many areas of people's lives (Buckworth, 2013).

Negative body image occurs when an individual has negative thoughts and feelings about their own body. This negativity with body image leads to body dissatisfaction. According to clinical research, body dissatisfaction is divided into three main areas: neurological disorders, body image dissatisfaction, and delusional misperception of one's body. A neurological disorder regarding body image is when a person has faulty perceptions about their body. Second, body image dissatisfaction refers to eating disorders. Finally, delusional misperception is when a person has body dysmorphophobia disorder (BDD). BBD is when a person will see themselves as overweight, when in fact, they are normal weight (Cash & Smolak, 2012). The onset of body dissatisfaction occurs during adolescence. This is complicated for young adult women because of the susceptibility with this population due to hormonal and puberty changes in the body. Due to the increase in hormones for young women, they had higher instances of negative body images (Fisher et al., 2013). People who have body dissatisfaction are not only prone to an eating disorder, but chronic diseases (Fallon et al., 2014). People who are dissatisfied with their bodies are less inclined to screen for cancer, smoke, and perform self-exams. There is a lack of research for young adults regarding any correlation to body dissatisfaction, disordered eating, and psychological well-being

for different races and ethnicities (Bucchianeri et al. 2015). Another important consideration was given for African American females and body image, instruments like the Body Dissatisfaction Scale of the Eating Disorder-3, was developed and used mainly for European American participants may not have the best reliability and validity for African American females. Thus, leading to misleading results for research involving African American participants and psychometric analyses (Kashubeck-West et al., 2013).

Self-Efficacy Research and BMI

Self-efficacy are referred to as the learned self-regulatory skills needed to deal effectively with lifestyle barriers associated with improvements in weight management behaviors. A person performing the task or behavior successfully does not automatically mean an increase in self-efficacy. However, increased self-efficacy is reliant on an individual's efforts with the task and pre-existing efficacy beliefs (Bandura, 1977). The observer must give their attention, motivation, retention, and productivity to the task at hand in order to increase self-efficacy. A study conducted on the initiation of breastfeeding revealed that women who believed that they would be successful at breastfeeding would be more likely to initiate the task of breastfeeding. Self-efficacy is influenced by external factors that will impact a person's perceptions about their body (Bandura, 1977). Although there is evidence linking self-efficacy to weight management, the research is very limited, and more research are needed to connect causal beliefs and risk-reducing behaviors to obesity in various ethnic groups (Joseph et al., 2016; Knerr et al., 2016).

SCT implied that the use of self-regulation is essential to acquiring control over an environment that requires minimal physical activity and makes high-calorie foods inexpensive and abundant (Annesi, 2019). Self-regulation's effect on physical activity and eating behaviors has an impact on self-efficacy. Self-regulation of eating occurred in the circumstance of an individual's knowledge of nutrition and attitudes. In order to improve one's weight management behaviors, learned self-regulatory skills need to be a part of the equation. Self-regulation has both qualitative and quantitative aspects and is dependent upon how one processes, uses, and employs the task at hand to be successful with self-regulating tasks (Balani et al., 2019). In terms of weight control, self-efficacy differed for individuals based on obesity status. Knerr et al. (2016) conducted a study to determine self-efficacy and its effect on obesity on women. The results revealed that self-efficacy for weight control indirectly linked physical activity attributions and physical activity. Complimenting Knerr et al. research (2016), Annesi (2019) findings from a study on self-regulation and obesity regarding women from different weight categories revealed positive results. Participants who developed better self-regulatory skills had an increase in exercise and dietary habits. On the other hand, the increase of self-regulation skills was dominant in females with lower instances of obesity, consequently, leading to more research for this outcome. Knerr et al. (2016) findings revealed that causal beliefs, self-efficacy relation to obesity were unclear for obese participants. Knerr et al. theorized that the overweight participants have more weight to lose than the thinner participants which caused discouragement. Also, there were no correlation for obese participants who were informed of their genetic risk for obesity and eating self-efficacy. These mixed

findings suggest that more research is needed regarding self-efficacy and obesity in not only African American women, but for other ethnicities.

Research was conducted regarding the effects of an internet-enhanced physical activity pilot intervention program for three months on overweight/obese female African American college students. The participants had to access a website and engage in four-moderate-intense physical activity programs on a weekly basis. Joseph et al. (2016) applied the main constructs of the SCT to the internet-enhanced program for these participants. Self-efficacy was represented by social modeling of peers by the supervised exercise sessions and website profiles. Observational learning was the exercise videos viewed by the participants and self-regulation was represented by the tracking of physical activity. The blogs and message boards displaying encouragement and promotion to exercise represented social support for the participants. Next, the exercise plans, videos, and blogs symbolized behavioral capability. Lastly, the outcome expectations were the blog posts of the participants exclaiming their personal testimonials of the benefits of exercising (Joseph et al., 2016). Results revealed that social modeling and persuasion with peers helped increase self-regulation for physical activity, social support, and outcome expectations for physical activity. There was a reduction in sedentary screen time from baseline to the three-month period of the study. On the contrary, results also revealed that there was a lack of an increase in moderate to vigorous physical activity for these participants (Joseph et al., 2016). One speculation is the three-month time period for this study had ended during final exams for these college students and this may have interfered with the time spent on physical activity. The heightened stress levels for these

participants and lack of physical activity affected the results of this study. Future research should take into consideration academic schedules for interventional activities regarding college-age participants (Joseph et al., 2016). Therefore, weight management treatments should emphasize self-regulatory skills development rather than health education (Annesi, 2018).

Summary and Conclusions

The findings of many research studies suggest that there is strong evidence linking the obesity epidemic suffered by African American women to socioeconomic, African American tradition, finances, and education (Annesi, 2018, Brown et al. 2014; Im et al. 2012). The literature also suggests the importance of considering how body satisfaction perceptions and self-efficacy relate to obesity (Annesi, 2018; Joseph et al., 2017). However, there is still a need to review how these factors influence obesity among African American women ages 18–24 in college. The next chapter will discuss the methodology of this dissertation.

Chapter 3: Research Method

Introduction

The purpose of this study was to quantitatively explore whether body satisfaction perceptions and self-efficacy correlated to obesity among African American women ages 18–24 in college. This chapter will include a discussion of the research design and statistical factors that are related to this study. The following subsections will include the research design, participants, data collection, instrumentation, planned statistical analysis, threats to validity, and ethical procedures.

Previous research focused on older women and health factors related to obesity and did not address younger, minority women (Alvardo et al., 2015). Chapter 3 will include: the research design, purpose of this study, selection of participants, rationale for the research design, description of instruments, data analysis, and procedures for recruitment. This section will also include the protection of the participants' rights, ethical considerations, threats to validity, and any special permissions needed to conduct this research. Lastly, Chapter 3 will include a description of the setting, sample selection, sampling method, population characteristics, and eligibility criteria.

Research Design and Rationale

A quantitative descriptive correlational research design was used to address the relationship between the variables. A quantitative approach is used for studies that involve numeric information, evaluation of theories, deductive reasoning, and measurable attributes of human experiences (Creswell, 2014). Quantitative research addresses a tendency to use logical, deductive reasoning and has measurable attributes toward human

experiences (Privitera, 2017). I used a quantitative, nonexperimental design to examine the relationship between body satisfaction, self-efficacy, and obesity as measured by BMI in 18–24-year-old African American women who are enrolled in college. Based on the principles of Mertler and Reinhart (2017), I used a multiple regression analysis to analyze body satisfaction and self-efficacy to connect to any strengths or weaknesses to BMI measurements.

Methodology

Population

The sample population varied in BMI; therefore, the only limit on inclusion within this population was that they had to be African American women, ages 18–24, currently enrolled in college. I used African American female students from Kean University. The population at Kean University is diverse: European Americans (36%), African American (20%), and Latino-American (27%).

Sampling and Sampling Procedures

I conducted a priori power analysis to determine the minimum number of participants required to conduct this research of studying the correlation between body satisfaction, self-efficacy, and obesity in African American women ages 18–24 in college. Based on the guidelines set by Faul et al. (2007) and Privitera (2017), I generated the calculations by using G*Power 3.1.9.4. I set the power of the study to .80, a two-tailed alpha level set at .05, the effect size was set at .15, which yielded a sample size of N=55. However, due to restrictions by the pandemic I received permission from committee members and partner university members to use 42 participants as opposed to

55. Several key pieces of information were required to determine the number of participants needed for a given study. Privitera (2017) described the alpha level, *p*-value, is generally set to .05 for most social sciences.

Moreover, the alpha level represents the probability of a Type I error (false positive). A Type I error is described as the rejection of the null hypothesis (Faul et al., 2007). I examined the power level of the study in order to predict the probability that the null hypothesis will be rejected. Typically, the power level is set at .80. This means there is an 80% chance the null hypothesis will be rejected. In accordance with Faul et al. (2007) and Privitera (2017), I determined the effect size for this study to be 42 participants to achieve a power of .80 for this research.

Procedures for Recruitment and Participation

I recruited participants through Kean University. I received permission from Kean University IRB Department to obtain information needed for the demographic questionnaire and assessments. This is part of Kean University's policy in order to comply with their psychology ethical research requirements. It should be noted that the participants in this study were not a protected population. The Kean University faculty advisors, Dr. Stavola and Dr. McKenzie, emailed participants before they began the survey process. The email contained the recruitment letter and an informed consent form. In the email, there was a hyperlink to the survey site. Participants had to acknowledge the informed consent before beginning the assessment.

The informed consent detailed participants understanding of the confidentiality of their responses, ability to withdraw from the study at any time, and contact information of

the researcher, chair, Dr. Brandy Benson, and methodology member, Dr. Jennifer Rounds-Bryant if the survey questions causes any distress or if they have any questions. Participants were able to keep a copy of the informed consent, description of the study for future reference, and debriefing of the study. I received permission from Kean University's IRB Department to defend my proposal, both written and orally, and was granted permission from Walden University to conduct this study.

Instrumentation

Body-Esteem Scale for Adolescents and Adults (BESAA)

Body esteem is how an individual evaluates their body and appearance. The BESAA has three subscales: BE-Appearance (feelings about appearances), BE-Weight (weight satisfaction), and BE-Attribution (other people's perceptions about your body) (Mendelson, Mendelson, & White, 2001). The BESAA is a 5-point scale; 0 = *never*, 1 = *seldom*, 2 = *sometimes*, 3 = *often*, and 4 = *always* (Mendelson et al., 1997). The test that I used in the study consisted of a 30-item version that evaluated body esteem based on a total score regarding weight, positive outcomes of weight, and appearance. I scored and analyzed the assessments using the demographic information. Based on the results, I determined if there were any predictors between body perceptions and obesity in 18–24-year-old African American women in college. I recruited from Kean University and I received permission from Kean University's school administrators before conducting this study.

The BESAA has high internal consistency and a 3-month test-retest reliability for the subscales. Women tend to score lower than men on the subscales for BE-Weight and

BE-Appearance (Mendelson et al., 2001). BE-Weight is the only unique subscale because of its relation to weight and its effect on female responses. Many female participants have been dissatisfied with their weight. BE-Appearance has been the only consistent subscale among most participants (women and men) because most of the participants have a general knowledge of their appearance (Mendelson, et al.). The measures demonstrated that men and women who gave themselves high evaluations for BE-Appearance had a tendency to have high self-esteem. In addition, BE-Attribution correlated less with BE-Appearance than BE-Appearance and BE-Weight, and BE-Attribution correlated higher with social self-esteem subscales than BE-Appearance and BE-Weight (Mendelson, et al., 2001).

Eating Self-Efficacy Scale

The ESES consists of 25 items and has two reliable factors: one yielding a Negative Affect (NA) and one yielding Socially Acceptable Circumstances (SAC) (Glynn & Ruderman, 1986). NA refers to a person's eating habits when it is impacted by a negative effect, and SAC refers to persons eating habits in social situations. Glynn and Ruderman (1986) devised this measurement while conducting a study on college students. This scale was devised to measure people's eating habits and see if there are any patterns with food selection. Participants' responses are made on a 7-point Likert Scale ranging from 1= *No difficulty controlling overeating* to 7= *Most difficulty controlling eating*. Higher scores on the ESES represents people having difficulty controlling overeating (Decker & Dennis, 2013).

The ESES displayed good internal consistency, test-retest reliability, and convergent validity (Glynn & Ruderman, 1986). Clinical studies demonstrate that ESES scores would increase significantly when they are related to weight loss programs (Joseph et al., 2016). The subscales NA and SAC of the ESES demonstrated great correlation between each other (Glynn & Ruderman, 1986). Both NA and SAC subscales demonstrated internal consistency (.85-.94) and test-retest reliability (.70). These subscales also validated construct and predictive validity in developmental studies (Decker & Dennis, 2013; Glynn & Ruderman, 1986).

Body Mass Index

The self-reported demographic questionnaires measured the BMI. The participants gave their heights and weights and then these measurements were converted into BMI, a formula provided by American Heart Association. The formula for BMI is weight (pounds) divided by height (inches) then multiplying the number by 703. I used BMI measurements to determine whether the participants are overweight or obese: *normal weight BMI* 20–24, *overweight BMI* 25–29, and *obese BMI* 30–39. The classifications for BMI was determined by American Heart Association.

Demographics Questionnaire

I used demographic questionnaires to determine participants' age, gender, heights and weights to determine BMI. These items were answered on the survey site prior to answering the other assessment tools. The rationale for using these variables was discussed in Chapter 2.

Data Collection and Analysis

The informed consent was provided to the participants before filling out the questionnaires and completing the assessments. After the informed consent was acknowledged, participants filled out a brief demographic survey, located in Appendix A, which included their height and weight (in order to calculate BMI), and age. The agreement between Kean University and myself, was to provide recruitment and informed consent forms by means of email to chosen participants prior to them completing the assessments. The informed consent contained a link to Momentive (formerly known as Survey Monkey) directing the participants to the surveys. I was not allowed to go on campus due to the COVID-19 pandemic therefore Kean University was closed. I emailed the informed consent and recruitment flyer to the two assigned Kean faculty advisors for distribution. At this point, the faculty members emailed the informed consent and recruitment flyers to prospective students. The participants were able to keep a copy of the recruitment letter, informed consent, and a description of the study for future reference. The participants' who proceeded to the link that directed them to Momentive signified their agreement to participate in the study. It also signified their willingness to provide their precise weight and height on the demographic questionnaires, and that they understand the assessments. Participants were not required to disclose their names or information that could identify them. Following the demographics section, participants completed the ESES and BESAA (Appendix D and E, respectively).

I used the statistical package for the social sciences (SPSS) to analyze the data gathered from the demographic questionnaires, BESAA, and ESES. The data collected

were analyzed using a multiple regression analysis. The screening process was included proofreading the data to ensure the data were entered correctly. Data were checked for missing data to determine if the incomplete data were due to ransom chance or a pattern. If there were no pattern to the missing data, the guidelines for missing variables were followed: I conducted an arithmetic mean imputation. An arithmetic mean imputation means using the mean of the available cases to fill in for the missing value (Fields, 2009). The participants had to complete all four sections of the survey, if not, their information was not be included in the study.

Through the informed consent, participants in this study were assured of the confidentiality involved with the personal information they provide for this research. No identifying information collected were divulged about the participants in this study. All personal information will remain with me in a confidential location. None of the published records of this study will reveal any names or identifying information about the participants. As a preventative measure, participants were advised to discontinue participation in this study or seek counseling services if they became distraught at any time during the study.

Descriptive statistics were obtained from each subscale of the BESAA and the ESES then the data were analyzed by using SPSS software. I used a simultaneous multiple linear regression analysis to answer the research questions regarding body satisfaction and self-efficacy regarding any correlation to obesity as measured by BMI in African American women in college. Multiple regression analysis was the best analysis for this research because there were two predictor variables. Before multiple linear

regressions can be calculated, one must determine if the variables are appropriate for multiple linear analysis. (Privitera, 2017).

Restatement Research Questions and Hypotheses

I examined the research questions and hypotheses to examine the relationship between body perceptions and obesity as measured by BMI among African American women in college. Data were used to answer the following research questions and test the following hypotheses:

Research Question (RQ1): Does body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults predict obesity as measured by the BMI among African American women 18–24 in college?

Null Hypothesis (*Ho*1): Body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults is not a predictor of obesity as measured by the BMI among African American women 18–24 in college.

Alternative Hypothesis (*Ha*1): Body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults is a predictor of obesity as measured by the BMI among African American women 18–24 in college.

Research Question (RQ 2): Does self-efficacy as measured by the Eating Self-Efficacy Scale predict obesity as measured by the BMI among African American women 18–24 in college?

Null Hypothesis (*Ho* 2): Self-efficacy as measured by the Eating Self-Efficacy Scale is not a predictor of obesity as measured by the BMI among African American women 18–24 in college.

Alternative Hypothesis (*Ha* 2): Self-efficacy as measured by the Eating Self-Efficacy Scale is a predictor of obesity as measured by the BMI among African American women 18–24 in college.

Table 1

Summary of Data Analyses Procedures

RQ#	Statistical Test	Criterion Variables	Predictor Variable
RQ1	Multiple Regression Analysis	Obesity	Body-satisfaction in African American females 18-24 in college
RQ2	Multiple Regression Analysis	Obesity	Self-efficacy in African American females 18-24 in college

Threats to Validity

External Validity

External validity is affected by the research design and types of statistical analyses used (Creswell, 2014). In addition, it is important to note that one's research should be able to be replicated regardless of the population, time, and location of the study. To ensure that this study is not affected by external validity, the researcher used a sampling model (Mertler & Reinhart, 2017). For this research, threats to validity included, but not limited to, the personal demographics that was submitted by the participants. This research was based on BMI categories and BMI's connection to self-

efficacy and body satisfaction. If participants do not give accurate measurements, provide truthful answers to the assessments, or give correct ages and weights, then this will lead to distorted study results. If participants are not truthful about being enrolled in school, then this will result in inaccuracies when analyzing the statistics.

Internal Validity

According to Mertler and Reinhart (2017), internal validity threats are factors that prevent researchers from drawing correct inferences from the specific population and determine how strong a study's research methods are for a study. These factors included participants' responses while completing an assessment. For this research, if a participant had lack of sleep the night before or recently experienced a traumatic event, then these circumstances would effect the participant's response to the assessments. As seen in previous research, African American women having a positive body image regardless of their BMIs may effect the results of the assessments (Antin & Hunt, 2013; Brown et al., 2014; Capodilupo, 2015; Gillen, 2013; Robinson & Jones, 2018). The best method to avoid internal validity is to randomly select the sample (Creswell, 2014). A random sample assumes that each participant has the same probability of being represented in the sample (Mertler & Reinhart, 2017).

Construct Validity

Construct validity is the degree to which an assessment tool is measuring what it is supposed to answer in a study (Mertler & Reinhart, 2017; Privitera, 2017). In Chapter 2 and earlier in Chapter 3, the BESAA and the ESES were defined. The BESAA was used to measure body satisfaction among African American women in college. The construct

validity for the BESAA was designed to evaluate participants on three subscales: BE-Appearance, BE Weight, and BE-Attribution and to ensure accurate self-evaluations of the participants (Mertler & Reinhart, 2017). The ESES was used to measure self-efficacy in African American women in college. I performed differential-groups study to avoid low construct validity scores.

Ethical Procedures

Working with human subjects required an application to the Walden's University's Institutional Review Board (IRB) before proceeding with data collection. Walden University's IRB must approve the application before any human subjects testing can commence. An email was sent to irb@waldenu.edu. After approval was given from Walden University's IRB, then approval was sought from Kean University. Approval was granted by both Walden's IRB and Kean University's IRB Department. Next, I worked with the two Kean faculty members by emailing them the informed consent and recruitment flyers. The faculty members emailed the informed consent and recruitment flyers to as many participants and other faculty members at Kean. Informed consent included: the nature of the study, purpose of the study, requirements of the study, any risks involved with the study, benefits to participating in the study, confidentiality, debriefing, and the rights of participants and researcher.

Confidentiality and anonymity were maintained by informing the participants that I was unable to identify their identities based on the information gathered. Participants were not asked to provide their names on the demographic data. I had no way to identify the participants, thereby ensuring their anonymity and confidentiality. All information

will be kept in a password protected computer to which only the researcher has access. All files will be destroyed after five years.

Summary

This chapter served to establish the foundation for the research design and methodology for a nonexperimental research approach. I presented the variables of body satisfaction, self-efficacy, and obesity among African American females ages 18–24 in college. The assessments that were used to determine any relationships between the variables was the BESAA, ESES, and demographics questionnaires. The data were analyzed using a multiple regression analysis in SPSS Statistical Version 22. Additional information regarding internal, external, and construct validities and ethical procedures were discussed in order to explain issues related to the validity of any results and treatment of participants. In Chapter 4, I will present the results.

Chapter 4

Introduction

The purpose of this quantitative study was to determine if the independent variables, body satisfaction and self-efficacy, as measured by BMI predict the dependent variable, obesity, among 18–24-year old African American women in college. There are two research questions addressed in this study. The research questions are:

Research Question (RQ 1): Does body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults predict obesity as measured by the BMI among African American women 18–24 in college?

Null Hypothesis ($H_0$1): Body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults is not a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Alternative Hypothesis (H_a1): Body satisfaction as measured by Body-Esteem Scale for Adolescents and Adults is a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Research Question (RQ2): Does self-efficacy as measured by the Eating Self-Efficacy Scale predict obesity as measured by the BMI among African American women ages 18–24 in college?

Null Hypothesis ($H_0$2): Self-efficacy as measured by the Eating Self-Efficacy Scale is not a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Alternative Hypothesis (H_a2): Self-efficacy as measured by the Eating Self-Efficacy Scale is a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

The data collection and responses to the assessments will be presented in this Chapter. The participant demographics were reviewed, and the results were presented according to each research question using correlational analyses. The chapter will conclude with a summary of the findings regarding the research questions and statistical significance of the results.

Data Collection

A 36-week time frame was used to collect data from participants. Participants were recruited by email, and surveys had been completed with no personal identifiers. A total of 42 participants that met inclusion criteria regarding age (18–24) and gender (female) responded to the email and completed the informed consent.

Demographic Characteristics of Study Participants

There were 42 participants that met the age inclusion criteria and agreed to participate. Of those 42, 33 (78.6%) had complete data required for hypothesis testing. There were two participants with no data available for BMI, two participants did not complete the BESAA nor the ESES, four participants had partially completed data for the BESAA but did not complete any items on the ESES, and one participant had complete data for the BESAA but did not complete the ESES. Demographic data is presented in Table 1 for weight, height (inches) for the participants. The average weight was 152.11 (SD = 29.40) with a range from 110 to 200. The average height was 63.5 inches (SD =

2.44) with a range from 60 to 69. Given that the population for this study was African-American college women ages 18–24, the study participants represent a small, but representative sample of the intended population. All participants reported their age as 18–24 (n = 33, 100%).

Table 2

Demographic Characteristics

Variable	*M*	*SD*	Min	Max
Weight (pounds)	152.11	29.40	110	200
Height (inches)	63.5	2.44	60	69

Note. M = mean; *SD* = standard deviation

Results

The results section will show descriptive statistics for the independent variables of body self-esteem and eating self-efficacy, as well as the dependent variable of BMI. Assumptions testing for the planned statistical analysis of multiple regression is presented. Evaluations were based on the statistical tests, the hypotheses were evaluated and summarized in narrative and chart format.

BESAA, ESES, and BMI

The BESAA questionnaire has a total of 23 items that are composed of three subscales: Appearance, Weight, and Attribution. The subscales are computed as the mean of the items with a range from 0 to 4, wherein higher scores indicate better self-esteem regarding each subscale. Appearance has 10 items, Weight has eight items, and Attribution has four items. The ESES had a total of 15 items with two subscales: Negative Affect and Socially Acceptable Circumstances. There were 15 items for the NA subscale and 10 items for the SAC subscale. The mean score is computed for each

subscale with a range from 1 to 7, and higher scores indicating more difficulty in controlling eating.

Descriptive Statistics

The Appearance subscale had a mean of 2.19 (*SD* = .76) with a range from .20 to 3.7. The Attribution subscale had a mean of 2.56 (*SD* = .85) with a range from .20 to 4.0. The Weight subscale had a mean score of 1.73 (*SD* = 1.03) with a range from 0 to 3.5. BMI had a mean of 25.93 (*SD* = 3.62) with a range from 18.3 to 33.7. The ESES Negative Affect scale had a mean of 3.59 (*SD* = 1.75) with a range from 1.0 to 7.0. The ESES SAC subscale had a mean of 3.58 (SD = 1.55) with a range from 1.0 to 7.0. The dependent variable BMI was normally distributed and had a mean of 25.76 (*SD* = 4.85) with a range from 18.3 to 33.7. Table 2 displays the mean scores for the BESAA and ESES subscales and the dependent variable of BMI.

Table 3

Descriptive Statistics for BESAA, ESAS, and BMI

Variable	*M*	*SD*	Min	Max
BESAA Appearance	*2.19*	*.76*	.20	3.7
BESAA Attribution	2.56	.85	.20	4.0
BESAA Weight	1.73	1.03	0	3.5
ESES NA	3.59	1.75	1.0	7.0
ESES SAC	3.58	1.55	1.0	7.0
BMI	25.93	3.62	18.3	33.7

Note. M= mean; *SD* =standard deviation

Normality Assumption Testing

The planned analysis used for this study regarding hypothesis testing was multiple regression as discussed in Chapter 3. The statistical analysis for hypothesis testing in this study addresses the guidelines of Hazra and Gogtay (2016) regarding correlational analyses as a preliminary requirement for regression analyses. This analytic plan provides the normality for the correlated variables that were first examined to determine if a correlation should be performed using a Pearson coefficient or a Spearman's rho non-parametric coefficient.

Table 4

Shapiro-Wilk Results for Normality Testing

Variable	Shapiro-Wilk Test Value	*p*
BESAA Appearance	.957	.212
BESAA Attribution	.951	.144
BESAA Weight	.939	.064
ESES NA	.936	.052
ESES SAC	.946	.105
BMI	.968	.430

Note. $p > .05$ indicates no deviations from normality

Body Satisfaction and Obesity

A Pearson correlation was conducted to test the first hypothesis and to determine if BMI and BESAA subscales were related due to the small sample size. The results of the correlation analysis were used to create a regression analysis, using a significance level of $p<.05$. Table 4 shows the results for normality testing.

Table 5

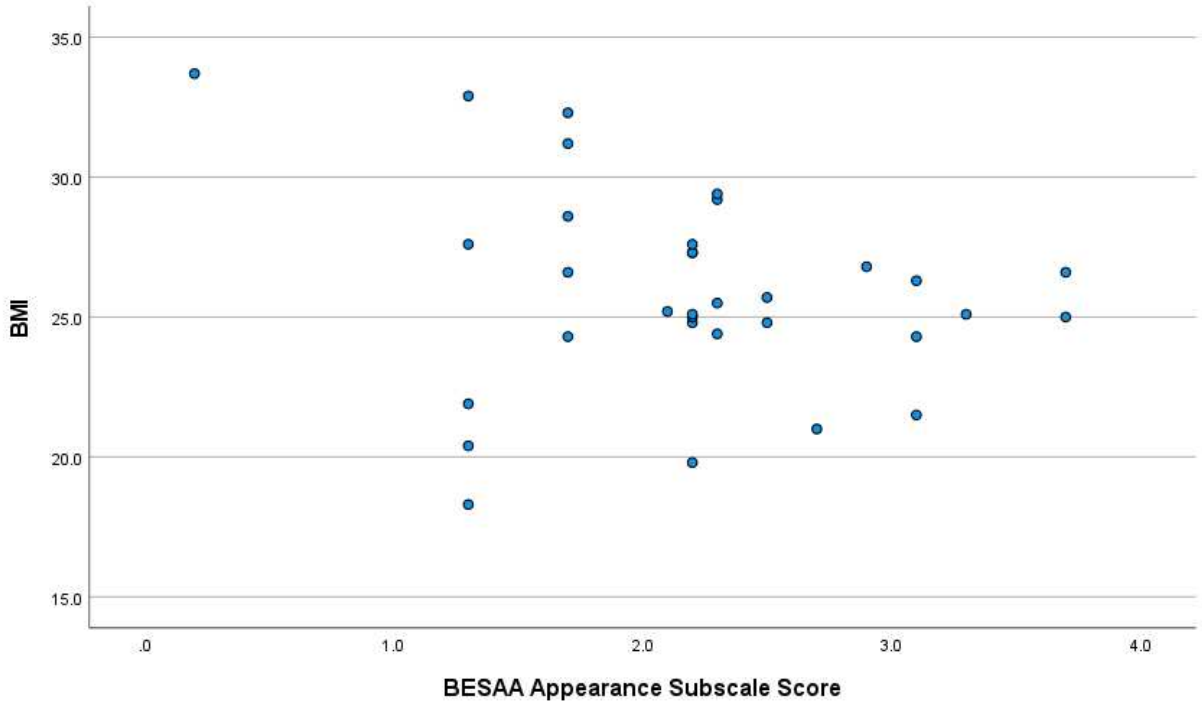
Pearson correlation for BESAA subscales and BMI

Variable		BESAA Appearance	BESAA Attribution	BESAA Weight
BMI	*r*	-0.258	-.472	-.379
	p	0.147	0.006	0.030

The BESAA Attribution subscale had a significant correlation with BMI (r = -.47, p = .006) indicating higher attribution scores were correlated with lower BMI values. The weight subscale of the BESAA had a significant negative correlation with BMI (*r* = -.38, *p* = .030) indicating more positive assessment of weight was correlated with lower BMI. Figures 1 through 3 display a scatter plot of the correlation between the BESAA subscales and participants' BMI.

Figure 2

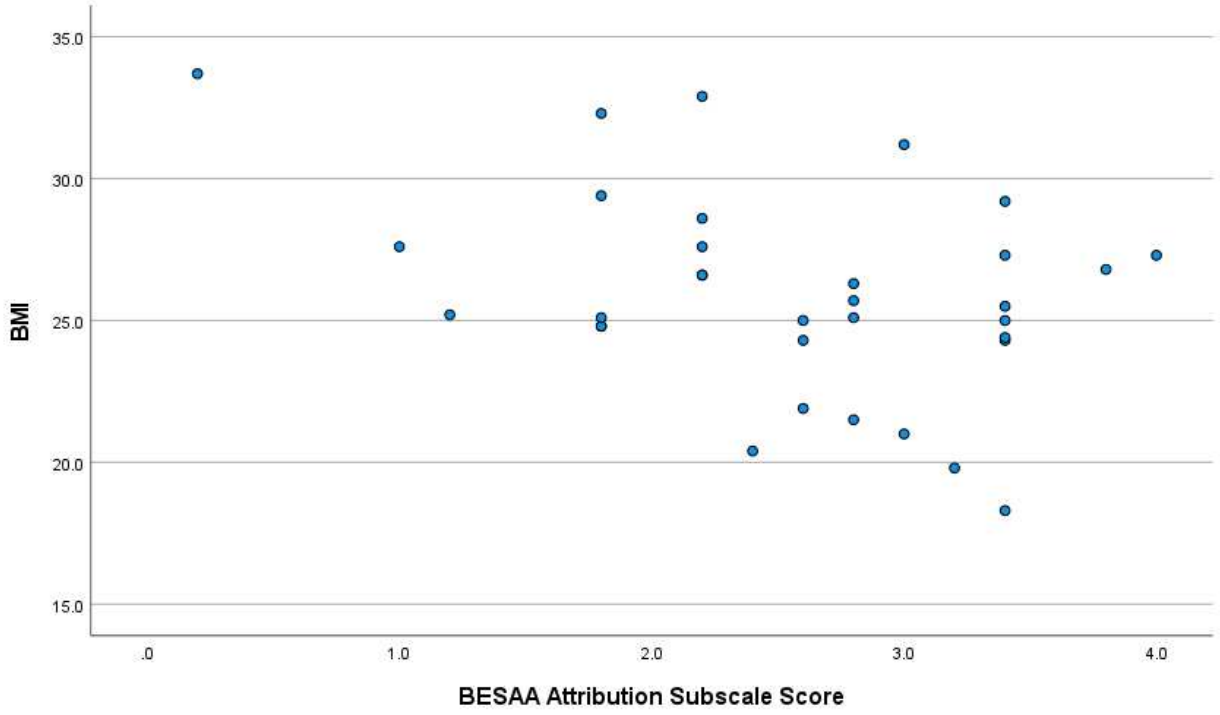
BESAA Appearance Subscale and BMI Scatterplot



Note. Higher scores indicate more esteem regarding appearance

Figure 3

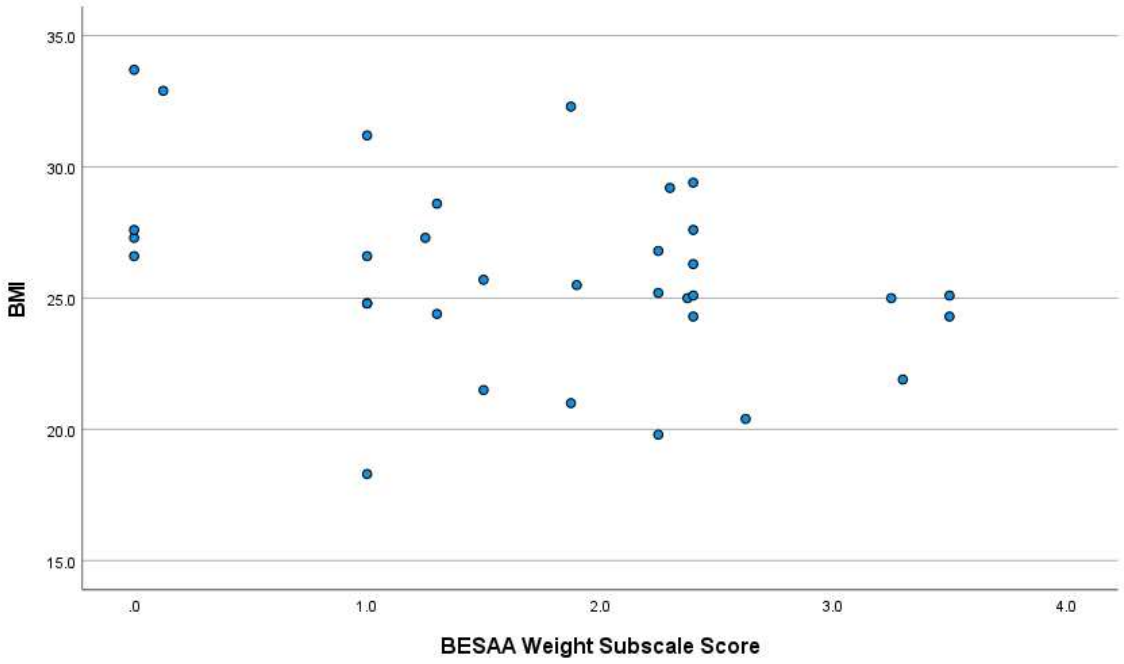
BESAA Attribution Subscale and BMI Scatterplot



Note. Higher scores indicate more positive attributions of body esteem.

Figure 4

BESAA Weight Subscale and BMI Scatterplot



Note. Higher scores indicate higher weight satisfaction.

Eating Self Efficacy and Obesity

To test the second hypothesis, the ESES subscales were correlated with BMI using Pearson *r* correlations. Table 6 displays the *Pearson correlation for ESES subscales and BMI.* The correlations were not significant.

Table 6

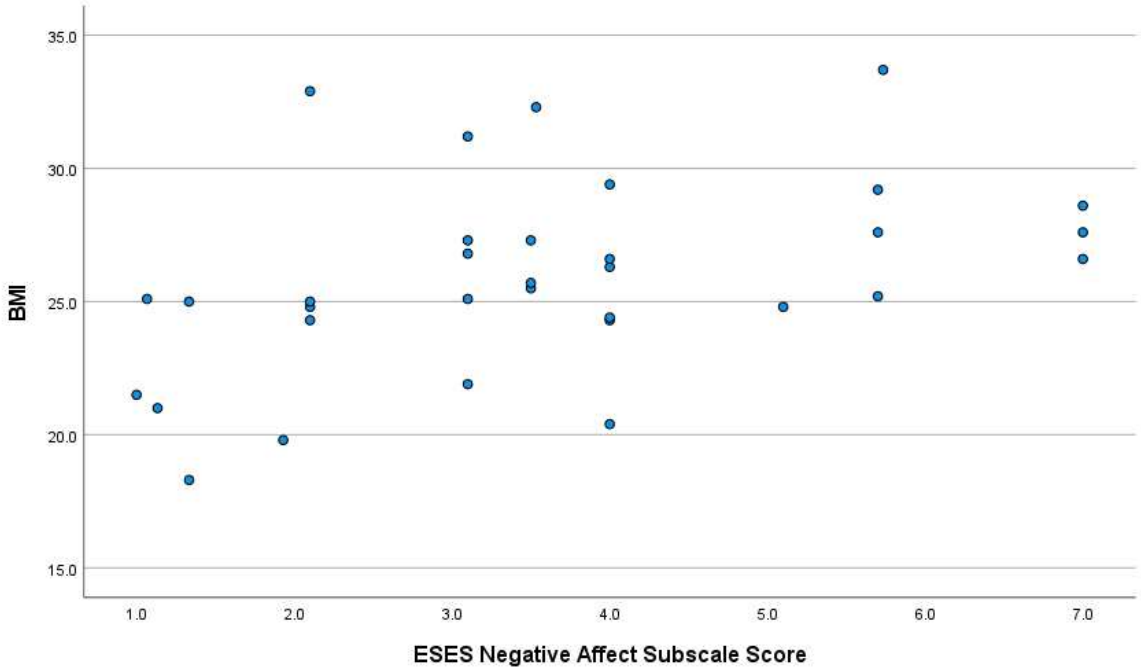
Pearson correlation for ESES subscales

Variable		ESES Negative Affect	ESES Socially Acceptable Circumstances
BMI	*r*	0.006	0.219
	p	0.976	0.220

Figures 4 and 5 display scatter plot of the correlation between the ESES subscales and participants' BMI.

Figure 5

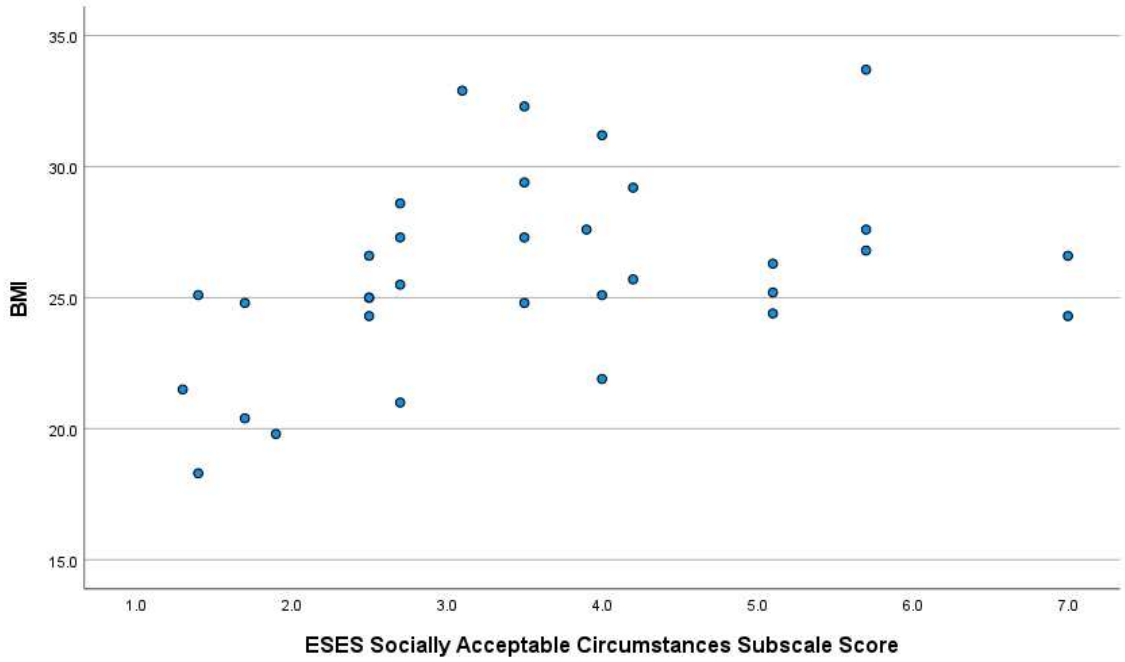
ESES NA Subscale and BMI Scatterplot



Note. Higher scores indicate more difficulty in controlling eating

Figure 6

ESES SAC Subscale and BMI Scatterplot



Note. Higher scores indicate more difficulty in controlling eating

Predictive Modeling

A multiple linear regression model was conducted in SPSS to examine the predictive relationship between the significant correlates on BMI. There were two subscales that showed significant correlations with the dependent variable of BMI: Attribution and Weight. The two significantly correlated subscales were included in a multiple linear regression model to determine which factors predict BMI. The overall model showed an adjusted $R^2 = .231$ indicating the model explained 23.1% of the variance in BMI. The model was significant, $F\ (2, 30) = 5.82$, $p = .007$. An inspection of the predictor variables showed higher Attribution scores to be a significant predictor

of lower BMI values (B = -1.62, Standardized β = -.39, t = -.238, p = .024. Table 6 displays the results of the linear regression model.

Table 7
Predicting BMI from BESAA Attribution and BESAA Weight Subscales

Variable	*B*	Standardized β	*t*	*p*
Overall Model				.007
BESAA Attribution	-1.62	-.39	-.238	.024
BESAA Weight	-.89	-.25	-1.53	.136

Note. Dependent variable: BMI. Overall Model R .529, R^2 (Adjusted) .279 (.231), F 5.82

Summary

Statistical analyses using IBM SPSS version 28 were conducted to address the research questions. The first question was:

Research Question (RQ1): Does body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults predict obesity as measured by the BMI among African American women ages 18–24 in college?

Null Hypothesis ($H_0$1): Body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults is not a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Alternative Hypothesis (H_a1): Body satisfaction as measured by Body-Esteem Scale for Adolescents and Adults is a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Does body satisfaction as measured by the Body-Esteem Scale for Adolescents and Adults predict obesity as measured by the BMI among African American women 18–24 in college? The null hypothesis for research question 1 was rejected due to BESAA Attribution as a significant predictor of BMI. It should be noted that the expected direction of the associations between the body satisfaction, eating self-efficacy, and BMI were supported, as higher body satisfaction was negatively correlated with BMI and higher difficulty in controlling eating was positively correlated with BMI, though not all correlations were significant. The results of the Pearson correlation analysis indicated that body satisfaction as measured by the BESAA Attribution subscale had a significant correlation with BMI ($p = .006$) indicating higher attribution scores were correlated with lower BMI values. The weight subscale of the BESAA had a significant negative correlation with BMI ($p = .030$), indicating more positive assessment of weight was correlated with lower BMI. The Appearance satisfaction subscale did not correlate to BMI ($p > .05$). A regression model further supported the association between Attribution and BMI, showing a significant predictive coefficient for the BESAA subscale of Attribution. However, the regression model did not show the BESAA subscale of Weight to be a significant predictor of BMI ($p>.05$).

The second Research question was:

Research Question (RQ2): Does self-efficacy as measured by the Eating Self-Efficacy Scale predict obesity as measured by the BMI among African American women ages 18–24 in college?

Null Hypothesis ($H_0$2): Self-efficacy as measured by the Eating Self-Efficacy Scale is not a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Alternative Hypothesis (H_a2): Self-efficacy as measured by the Eating Self-Efficacy Scale is a predictor of obesity as measured by the BMI among African American women ages 18–24 in college.

Does self-efficacy as measured by the Eating Self-Efficacy Scale predict obesity as measured by the BMI among African American women 18–24 in college? The ESES subscales were not correlated with BMI using a Pearson r correlations. The NA subscale showed a non-significant positive finding with BMI as demonstrated in Figure 4, (r=.01, p=.976). The SAC subscale showed a non-significant positive finding with BMI, (r=.22, p=.220). The results of the Pearson correlation analysis indicated that self-efficacy as measured by the ESES did not correlate to obesity, as indicated by $p > .05$. There were no statistically significant findings between the independent variables (BESAA and ESES subscales) and the dependent variable of BMI, a regression analysis was not conducted on the project data collected. The Appearance subscale of the BESAA was not significantly correlated with BMI nor were the NA and SAC subscales from the ESES. Therefore, the data for this study did not allow a rejection of the null hypothesis for research question 2 as evidenced by non-statistically significant correlations between the self-efficacy subscales and BMI of participants.

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Chapter 5 will offer a summary of the findings in relation to previous literature on body satisfaction, self-efficacy, and obesity. The theoretical and practical implications of the results will be outlined. The chapter will offer limitation of the study in regard to the validity and reliability of the data utilized to examine the study hypotheses. Recommendations for future research and clinical settings will conclude the chapter.

Chapter 5

Introduction

The purpose of this quantitative study was to determine if the independent variables, body satisfaction and self-efficacy, predicts the dependent variable, obesity, as measured by BMI scores, among 18–24-year-old African American women in college. This research focused on African American women between the ages of 18–24 because of the increased obesity rates and limited research for this population. In addition, the complexity of the age group 18–24, exiting puberty, and entering adulthood, led to more influential factors.

I chose a quantitative method with simultaneous multiple linear regression analysis in order to determine if the independent variables will affect the dependent variable. A nonexperimental approach was better suited for this research due to the inability to manipulate the variables. For this research, a two-tailed alpha level was set at .05, the effect size was set at.15, and this yielded a sample size of 55. I used demographic questionnaire to obtain participant's age, weight, height, and to determined BMI measurements. Body satisfaction was measured using the BESAA. Self-efficacy was measured using the ESES. Overall, the results showed non-significant correlations between the independent and dependent variables. However, the research did reveal significant findings between body satisfaction, self-efficacy, and women who had high BMIs.

Interpretation of the Findings

Obesity and African American Women

I examined body satisfaction, self-efficacy, and BMI for African American women, the results of this research did not provide further information beyond previous studies. The demographic characteristics revealed that the highest weight was 200lbs and the lowest weight was 110lbs; the mean weight of 152 lbs. The highest height was 69 inches while the lowest height was 60 inches. The mean height was 63.5 inches. The maximum BMI value was 33.7 and the lowest BMI value was 18.3, while the average was 25.93. There was a total of 42 participants, 33 (78.6%) had completed data required for hypothesis testing. There were several participants who did not complete the demographic for BMI, the BESAA, or the ESES, and partial completions of the BESAA and ESES. The results from this research, does not address the question to the possibilities as to why young African American women have increased BMI levels. I found significant statistical findings under a few of the subscales for the BESAA (particularly Attribution and Weight subscales), however, not enough to reject the null hypothesis.

Body Satisfaction and BMI

The BESAA questionnaire has a total of 23 items that are composed of three subscales: Appearance, Weight, and Attribution. Based on the Pearson correlation, BMI and BESAA subscales were related due to a small sample size. The results of the Pearson correlation analysis indicated that body satisfaction as measured by the BESAA Attribution subscale had a significant correlation with BMI ($p = .006$) indicating higher

attribution scores were correlated with lower BMI values. The Weight subscale of the BESAA had a negative correlation to BMI indicating positive assessment of weight was correlated with lower BMI values.

Although the results did reveal significant findings between body satisfaction and BMI, it did not reveal why participants had a higher body satisfaction with low BMI levels. Considering the study took place at a diverse university, one may draw the conclusion that body satisfaction does affect BMI levels. Sanderson et al. (2013) outcome was that African American women were more satisfied with their weight regardless of their obesity levels. Whereas this research contradicts Sanderson et al. in that higher body satisfaction was found among participants who had lower BMI. The higher the BMI, the least satisfied that participant was with their weight. It could be the fact that the African American females at Kean University were somewhat influenced by their White counterparts or other cultures at Kean University. More research with body satisfaction will be needed to determine this information.

Self-Efficacy Research and BMI

I found that the ESES subscales were not correlated with BMI using a Pearson r correlations. The NA subscale showed a nonsignificant positive finding with BMI as demonstrated in Figure 4, (r=.01, p=.976). The SAC subscale showed a non-significant positive finding with BMI, (r=.22, p=.220). The results of the Pearson correlation analysis indicated that self-efficacy as measured by the ESES do not correlate to obesity, as indicated by $p > .05$. Given that there were no statistically significant findings between the independent variables (BESAA and ESES subscales) and the dependent variable of

BMI, I did not conduct a regression analysis on the project data collected. The Appearance subscale of the BESAA was not significantly correlated with BMI nor were the NA and SAC subscales from the ESES. Therefore, the data for this study did not allow a rejection of the Null Hypothesis (($H_0$2) for Research Question (RQ2) as evidenced by non-statistically significant correlations between the self-efficacy subscales and BMI of participants.

The results regarding the ESES demonstrated that there was no statistical significance to self-efficacy and obesity. Knerr et al. (2016) also revealed no statistical significance for self-efficacy and obesity. However, Knerr et al. concluded that although self-efficacy is an important factor to assist with obesity, it should not be the only factor to consider for obesity. Knerr et al. study contributes to self-efficacy and causal beliefs as well as genetic causal beliefs. The results revealed that further research is needed for self-efficacy in a longitudinal or theoretical study.

Theoretical Framework

The theoretical framework for this research was SCT. SCT describes people as active agents who are influenced by the actions of others, individual experiences, and environmental factors on individual health behaviors (Bandura, 2001). SCT has several constructs: self-regulation, self-efficacy, and social support (Joseph, 2017). According to previous research, self-efficacy is a pivotal construct because of its connection to obesity, health-related factors, and my research (Tennant, 2016). Self-efficacy refers to the learned self-regulatory skills needed to deal effectively with lifestyles barriers associated with improvements in weight management behaviors. Previous research have shown that

the number of obesity rates among young African American women is steadily increasing due to biological, psycho-social, socioeconomic circumstances, and cultural factors (Acheampong & Haldeman, 2013; Johnson & Wesley, 2012). However, there were some constructs where there were no significant findings such as behavioral capability, observational learning, reinforcements, and expectations. These constructs within SCT yielded no results in this research.

The findings from the BESAA scales did not support the notion that women with high BMIs had a more positive body satisfaction. Similarly, both subscales Attribution and Weight revealed similar findings. High attribution scores correlated with lower BMI values and those participants who had a positive assessment of weight was correlated with lower BMI values. Unlike Sanderson's et al. findings, African American women in this research did not have high body satisfaction and high BMIs. However, African American participants with lower BMI scores have a high body satisfaction, higher Attribution scores, and have a more positive assessment of their weight. High body image for African American may be attributed to other factors beyond the body. Awad et al. (2015) revealed that for college African American women body image is not an important factor when it pertained to body image. Hair and skin tone were other factors that determined body image for college African American women. Furthermore, Awad et al. (2015) findings indicate that besides studying body other factors need to be incorporated such as hair and skin tone. Awad et al. (2015) suggestion for African American women and body image need to expand beyond African American women's body.

I conducted this research at a diverse university and I was unable to determine if outside influences affected these results. Furthermore, Sanderson's et al. (2013) research show African American women's weight satisfaction from a predominantly African American college with weight satisfaction from a predominantly all European American college. Results from that study revealed that African American women from the predominantly all African American college were more satisfied with their weights than the African American women at the predominantly all European American College. It would be difficult to determine if the results from this research were influenced by the demographics of Kean University because of the diversity of the university. Overall, the research had some nonstatistical significant findings between self-efficacy subscales and BMI of participants, which means the null hypothesis cannot be rejected.

Similar to Knerr et al. (2016), other factors may play a role with body satisfaction and obesity among young African American women. Furthermore, findings suggested that although African American women have high body satisfaction, socioeconomic, education, and traditional practices affect BMI for African American women (Johnson & Wesley, 2012; Joseph et al., 2016). Joseph et al. (2016) researched physical activity and African American women in college Their findings revealed an increase in physical activity among young African American women when they promoted physical activity among each other. This was achieved by blogging and navigating the internet and these activities were affiliated with a younger generation. The outcome of Joseph et al. (2016) study was that the growing increase in technology may provide further self-efficacy skills for overweight African American women.

Awad et al. (2020) revealed that although past research have revealed that African American women have a higher body satisfaction than their European American counterparts, this is not the case for younger African American women. Awad revealed that adolescent African American girls scored higher on a drive for thinness measure than their European American counterparts. There has been a shift of high body satisfaction for older African American women to an increase of high body dissatisfaction among young African American women. Younger generation of African American women are starting to have a different outlook on health as it pertains to obesity. This shift in ideology was one of the reasons for me to conduct research on young African American women.

Another factor to consider is cultural variables and body satisfaction among African American women (Awad et al., 2020). Awad et al. (2020) stated that cultural variables regarding body image need to be studied further as the research is few to nonexistent for African American women. Awad et al. (2020) research was conducted on two hundred and 78 African American women who were enrolled in a Midwestern university, that was predominately European American. The results revealed that African American women who had a strong ethnic identity tend to have less body dissatisfaction and fewer eating disorders. Cultural variables tend to play a role in obesity studies and should be accounted for when researching on body image. Even when cultural variables are not intentionally studied they tend to be a factor (Awad et al., 2020). These results were similar to Sanderson et al. (2013) research in that race tends to play a major factor for the African American women who were in enrolled in a predominately European

American college and body image. Body satisfaction and self-efficacy in regard to obesity need to include a multitude of factors for African American women to fully understand how the variables connects.

Limitations of the Study

The results of this study should show the following limitations. First, I used priori power analysis to select the participant size for the quantitative portion of this study and the sample size was relatively small (N=55). As a result, the sample was not representative of all young (18–24) African American women in college and the results cannot be generalized to all African American women in this age group. Second, given the correlational nature of this study, a cause-and-effect relationship between the dimensions of body satisfaction, self-efficacy, and obesity cannot be drawn. Because correlation is not causation, I cannot establish whether body satisfaction and self-efficacy effect BMI levels

One of the limitations to this study is the participant's answers in this research due to the sensitive topic, many women may not have responded truthfully to the questions in demographic questionnaires. Both the partner university as well as Walden University would not allow me to collect data in person due to the sensitivity of the research topic. This may have led to participants belonging to the wrong age group answering questions to the BESAA and ESES. If a participant was not between the ages of 18–24, then research was being collected for two different age groups. There was no way to determine these limitations due to the anonymity of the research. Participants should have answered the questions truthfully to both the BESAA and ESES to ensure accurate

answers for this research. There is no way to ensure this took place among the participants.

I obtained 42 participants for this study which were lower than expected due to difficulty getting participants. I had determined the subject number by calculations using G*Power 3.1.9.4, power was set at .80, using a two-tailed alpha level set at .05, and an effect size set at .15, which gave *N*=55. Because 42 participants were recruited for this research, 55 may have led to more statistically significant findings for this research. Another limitation was that research was collected at one university. Even though Kean University has a diverse population, opening up to other universities may have yielded different results. For instance, using an all-women's college in a rural area versus a university in a suburban area with both genders in attendance may have given different outcomes. This research was only available to African American women. Although opening the research to other races and genders would provide more data regarding body satisfaction, self-efficacy, and obesity; there was a need for more data pertaining to African American women only.

More research will be needed to explore all the constructs of the SCT: reciprocal determinism, behavioral capability, observational learning, reinforcements, and expectations. I did not thoroughly research these constructs in this study. This may require a longitudinal study for participants since some of the constructs require a more in-depth perspective. For instance, reciprocal determinism refers to an individual's learned experiences, and connecting those learned experiences to their environment; then an observation will be made studying their reactions to their environment and attained

goals (Bandura, 2001). This particular construct refers to what an individual has learned over time and how they applied it to their current situation.

Recommendations

Obesity is a sensitive topic, and a healthy weight can be difficult to maintain. Today with so many social influences, perceptions of overweight vary across persons. More research needs to be conducted to examine in-depth reasons as to why obesity affects African American women. Considering that there are many factors that affects obesity for African American females such as biological, psycho-social, socioeconomic circumstances, and cultural factors (Acheampong & Haldeman, 2013; Johnson & Wesley, 2012). The factors need to be researched independently and using a longitudinal approach. The idea that obesity may start at a young age may need to be explored starting at a younger age and followed through until early adulthood or perhaps late adulthood.

Kashubeck-West et al (2013) research concluded that obese African American females in college acted as a peer network for one another. African American females acting as a support network, can assist with weight control and goals. The cultural influences in this situation can provide positive connections regarding weight loss and young African American women may not feel alone in their approach with obesity. A recommendation for this study, would have been to focus more on the other constructs of SCT. For instance, using measures that can assess a person's reciprocal determinism, behavioral capability, observational learning, reinforcements, expectations, and how these constructs apply to BMI levels. Another recommendation would have been to open

to conduct the research using two universities. Perhaps, one university is at a brick and mortar while the other university is online.

Implications

The implication for positive social change is the potential impact on improving healthy eating behaviors among young African American women. This research focused on a specific age group (18–24), however, further research should start at a younger age to understand the beginning mindset of African American females. This will help address the beginning stages of eating habits and body satisfaction for African American females. This gives researchers a better insight at what should be the focus to obesity and African American females. Perhaps an approach using observational learning may be more appropriate to determine obesity factors.

African American females acting as peer support may influence other African American females that struggle with their weight. Joseph et al. (2016) conducted research on internet-enhanced physical activity program for African American females who were overweight/obese, and in college. Self-efficacy was represented by social modeling of peers by the supervised exercise sessions and website profiles. This was a great tactic because research showed that social modeling and persuasion helped increase self-regulation for physical activity, social support, and outcome expectations for physical activity (Joseph et al., 2016). From a social change perspective, preventative measures, and appropriate treatment modalities are major concepts to avoid obesity. These preventative measures and suggestions may be implemented in grade schools, high schools, colleges, and in the workplace. Similar preventative psycho-educational programs have shown to

help reduce high BMI levels among African American females (Annesi, 2018; Joseph et al., 2016).

Conclusion

This research study of *N*=42 was developed to understand how body satisfaction, self-efficacy, affect BMI levels among young African American women, given the limited research available for this population. The purpose of this quantitative study was to explore the relationship between the independent variables (body satisfaction and self-efficacy) and the dependent variable (obesity). These variables were examined to understand the participants' responses regarding body satisfaction and self-efficacy and how it applies to their current BMI. Comparisons were made of the participants BMI levels (i.e., normal, overweight, obese; dependent variables) and their responses to the BESAA and ESES.

It was hypothesized that there would be negative body image and low self-efficacy scores associated with high BMI levels. Positive body image and high self-efficacy scores were hypothesized to be associated with low BMI levels. The literature review considered the impact of media images of other women, background history of eating habits for African American females, physical activity levels, high body satisfaction for African American women, past research for older White women, socioeconomic factors, biological, and cultural factors. Given the limited amount of research for young African American women, research results helped prove my proposed hypotheses was challenging. The lack of significant findings for one of the measurements

(ESES) aligns with the need for further research on body satisfaction and self-efficacy for African American females and obesity.

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Appendix A: Demographic Questionnaire

Participant # 1

DEMOGRAPHIC QUESTIONNAIRE

1. Participant's Age:
2. Participant's Height
3. Participant's Weight

BMI calculation

Appendix B: Afrocentric Theory

Afrocentric Theory will be used as supplemental information for this research because of its specificity to African Americans and African culture, beliefs, and practices (Asante, 2010; Khokholkova, 2016). Afrocentric theory is described as an intense interest in African history and culture; the suggestion is that African American's focal point should be on African culture. This theory is specific in enhancing African American's knowledge in areas such as: social, political, economic, and religious phenomena (Khokholkova, 2016). Together, SCT and Afrocentric theory, may assist young African American women with understanding the conceptualization for their behavior toward food consumption and physical activity (Boggs et al., 2013; Tennant, 2016).

Asante (2010) stated that African Americans have assimilated into European culture and are not knowledgeable about their African ancestry. In some instances, some African Americans are embarrassed by their African culture when they should have more pride in promoting it (Asante). Furthermore, Asante proclaimed that it is not only awareness African Americans must have for their African culture, but African culture awareness must be passed down from generation to generation (Asante, 2010; Mustakeem, 2008). Cultural unawareness stems from African Americans being subjected to European standards throughout their lives (Tennant, 2016). African Americans must reject European beliefs and practices especially when it pertains to skin color, body types, and hair. Further, these European standards are what African Americans have been exposed to since slavery (Asante, 2010; Mustakeem, 2008; Tennant, 2016).

Asante's (2010) Afrocentric theory discussed African Americans rejecting European standards in order to add value to what is true to self and no other ethnicities standards (Tennant, 2016). The theory also proposed that African Americans have had a generational effect of mistrusting Caucasian society due to past negative experiences with this ethnic group. The combination of SCT and Afrocentric theory's concepts aide African American women regarding body perceptions and obesity (Asante, 2010; Khokholkova, 2016; Mustakeem, 2008).

One aspect to the Afrocentric theory is the cultural impact it had on African Americans and food selection. The belief is the transportation of slaves from Africa to America which lasted anywhere from 26 to 72 days. During these long transport, preserved foods were utilized due to the amount of people who needed to eat and how long the food needed to last during the commute. Healthy foods, such as fruits and vegetables were not given to slaves because these foods would not stay fresh during this type of transit and were saved for the slave traders (Asante, 2010; Khokholkova, 2016; Mustakeem, 2008). Foods high in salt (e. g. salted meats), uncooked beans, rice, and yams were used due to the decreased chance of them becoming spoiled. In most situations, the transported slaves only ate one to two times a day, and the meals were not nutritional. These historical factors continue to affect current dietary trends among African Americans, especially African American women (Asante, 2010).

For example, in Gillen's (2013) research the constructs, self-efficacy and self-regulation, were elicited to the participants perceiving themselves as the primary barrier to exercising. Further, the findings of her research solidified the finding that SCT assisted

study African American participants with physical activity and healthy eating behaviors (Joseph et al., 2017). Afrocentric Theory provides further explanations as to why African American women have a higher degree of body satisfaction or dissatisfaction despite being overweight or obese. The Afrocentric theory assists African American women with having a better understanding regarding body perceptions and obesity (Khokholkova, 2016; Tennant, 2016).

Appendix C: Permission to use the Eating Self-Efficacy Scale

Date: October 30, 2019

To: Sacha Morris-Dorsey

From:

Enclosed is the:

Eating Self-Efficacy Scale (AN 8078)
Shirley M. Glynn and Audrey J. Ruderman

As I have indicated authors like to receive feedback on your study. All that is asked is that you provide a brief summary of your findings upon completion of your study/project. In addition, we encourage you to send a full report which we will consider for inclusion in Health and Psychosocial Instruments (HaPI) and which you may list on your vita/resume.

You have the author's permission to use the above instrument(s).

Please note that the instruments are for a single study only. It is, of course, necessary to provide the appropriate title and author credit in reproduced material and in your report.

Appendix D: Eating Self-Efficacy Scale

Eating Self-Efficacy Scale

Shirley M. Glynn and Audrey J. Ruderman

Acronym

ESES.

Primary Source

Glynn, S. M., & Ruderman, A. J. (1986). The development and validation of an eating self-efficacy scale. Cognitive Therapy and Research, 10, 403-420.

Purpose Statement

ESES is a "25-item scale yielding two…factors—one concerned with eating when experiencing negative affect (NA) and the other with eating during socially acceptable circumstances (SAC)" (p. 403). "Subjects are asked to rate their difficulty controlling their eating on a 1 (no difficulty controlling eating) to 7 (most difficulty controlling eating) rating scale for each of the 25 conditions" (p. 407).

Appendix E: The Body-Esteem Scale for Adolescents and Adults

Oct. 24, 2019

To whom it may concern:
My name is Sacha Morris-Dorsey, and I am currently enrolled at Walden University as a doctoral student in the School of Psychology. I am in the dissertation proposal phase. I would like to gain access to your assessment, Body-Esteem Scale for Adolescents and Adults, to use in my dissertation research.

My dissertation is on Body Satisfaction, Self-Efficacy, and Obesity in 18-24 years old African American women in enrolled in college. I plan to get participants from Kean University and Walden's Participant Pool. Thank you for your time and consideration.

Sacha Morris-Dorsey

Appendix F: Rejected Emails for the Body-Esteem Scale for Adolescents and Adults

Student was advised by IRB to show rejected emails for Body-Esteem Scale for Adolescents and Adults, please see below:

Sacha Morris-Dorsey
Sun 11/3/2019 9:21 AM
· 2nd attempt permission for assessment
25 KB

You forwarded this message on Sun 11/3/2019 9:21 AM

·
You forwarded this message on Sun 11/3/2019 9:21 AM
·
To send this message again, click here.

MO

·
·
·
·
·
Microsoft Outlook
Tue 10/22/2019 3:53 PM

- 2nd attempt permission for assessment

Undeliverable for BESAA

Sacha Morris-Dorsey

Sunday, November 03, 2019 11:34 AM

Actions
To:

Sunday, November 03, 2019 11:16 AM

You forwarded this message on 11/3/2019 11:34 AM.

IRB

This is an autoreply so you have confirmation that your email was received. Thank you for emailing Walden's Institutional Review Board (IRB). We recognize that most researchers at the IRB phase are eager to begin data collection. Thus, all inquiries and submissions

11:15 AM

Sacha Morris-Dorsey

Sunday, November 03, 2019 11:14

Good morning,
My name is Sacha Morris-Dorsey and I have been in contact with your department regarding permission to use the Body-Esteem Scale for Adolescents and Adults. I have been unsuccessful in contacting the publisher's regarding use this assessment. I have made three attempts: Oct. 24th, Oct. 28th, Oct. 30th. Please let me know if I need to do anything further regarding this matter.
Student ID A00107406

Sacha Morris-Dorsey

Permission to use BESAA 3rd attempt

Sacha Morris-Dorsey

Actions

To:
Sacha Morris-Dorsey
Cc:

Attachments:
Permission to use BESAA 2nd a...

Thursday, October 31, 2019 4:24 PM

3rd Attempt for BESAA.....
From: Microsoft Outlook
<MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@alaureatena.onmicrosoft.com>
Sent: Wednesday, October 30, 2019 2:16 PM
To:
Subject: Undeliverable: Permission to use BESAA 2nd attempt

Delivery has failed to these recipients or groups:

Your message couldn't be delivered. The Domain Name System (DNS) reported that the recipient's domain does not exist.
Contact the recipient by some other means (by phone, for example) and ask them to tell their email admin that it appears that their domain isn't properly registered at their domain registrar. Give them the error details shown below. It's likely that the recipient's email admin is the only one who can fix this problem.
For more information and tips to fix this issue see this article: https://go.microsoft.com/fwlink/?LinkId=389361.

Diagnostic information for administrators:
Generating server: SN6PR17MB2526.namprd17.prod.outlook.com
Remote Server returned '550 5.4.310 DNS domain does not exist [Message=InfoDomainNonexistent] [LastAttemptedServerNam [CO1NAM05FT053.eop-nam05.prod.protection.outlook.com]'
Original message headers:


```
ARC-Seal: i=1; a=rsa-sha256; s=arcselector9901; d=microsoft.com;
cv=none;


b=Xe/dvYQPszvWZY2ChpXRm9MzA99H4O868DXpLhJCWYJfhhH2p92mADjjY89Dygx8CzOsD
6fWKYqaxpUHHojG5o5fq2RCMSxSI/EVoBq7LSRc955ho1jkckXRg3+ntKAz5E1HMATolrOR
cq7B6u+H1TOd5U+W953SSvXariZ6nUBp2JBYwwtAhg5PSSsufpHrsJf2uVfT23HSQrT1mMM
lewc/3vq3UC1SHV4iLNNE7lLk2TGOBCkcppDwuc8YPFEVTrqqOM/CVrln0RYXvw7JjcTS6i
MuyJD+5/SHFczYjMgCzXb2NLr4qU9N2MKo6JvtpPR5nARcCEakyL70lrpiug==

ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed;
d=microsoft.com;

 s=arcselector9901;

 h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-
Exchange-SenderADCheck;

 bh=Tahj4h5avU35PGjQ7AuoFNYJvI+czXA6sEF/2OINqZ8=;


b=IkWZG+zh3SvfMQB2zCnsgRPUL65Gsep4/n/Xehed8R/FVg8l177DsN7mSG1ZcpFN3QVmS
v3GC1yrWm6a5ov6bUdg2rM6iL9MfvUwf2Xr1YXZHA7qkWXd/n6gUwoNifT0ituGyAMC8NGj
ptz1AEkywA2rRnpJpG2W6DL64ykfJzuCsVBuNU9AvaxYChTxkUBbMfUG694JeaHS25TWHQk
eFDywja/iyCLt48bCD034IpEZSzjqyA5gMIaU0rHwIL+Wd2svhEVacyQArkmbyvof3lXO4U
rayb7r+Ib0kfYqP4M6I3ZWjsg/w5Y/t+HP49qZvcst9iL0YjbyoOHQP3nEsQ==

ARC-Authentication-Results: i=1; mx.microsoft.com 1; spf=pass
```

smtp.mailfrom=waldenu.edu; dmarc=pass action=none
header.from=waldenu.edu;

dkim=pass header.d=waldenu.edu; arc=none

DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;

d=alaureatena.onmicrosoft.com; s=selector2-alaureatena-onmicrosoft-
com;

h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-
Exchange-SenderADCheck;

bh=Tahj4h5avU35PGjQ7AuoFNYJvI+czXA6sEF/2OINqZ8=;

b=G7USgchu8YEw2luw5hCLBiqjy70/d2FAFnrgIdics/rEuTw1Fuhnhh1jo26rnU2VFE0ho
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Received: from SN6PR17MB2176.namprd17.prod.outlook.com (52.135.87.27)
by

SN6PR17MB2526.namprd17.prod.outlook.com (52.135.126.10) with Microsoft
SMTP

Server (version=TLS1_2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384)
id

15.20.2387.24; Wed, 30 Oct 2019 18:16:51 +0000

Received: from SN6PR17MB2176.namprd17.prod.outlook.com

([fe80::9190:7e62:5e0d:26a4]) by
SN6PR17MB2176.namprd17.prod.outlook.com

([fe80::9190:7e62:5e0d:26a4%5]) with mapi id 15.20.2387.027; Wed, 30
Oct 2019

18:16:51 +0000

From: Sacha Morris-Dorsey

To:

CC:

Subject: Permission to use BESAA 2nd attempt

Thread-Topic: Permission to use BESAA 2nd attempt

Thread-Index: AQHVj04z3x1ubvbhDkmcJePN8oPfyA==

Date: Wed, 30 Oct 2019 18:16:51 +0000

Message-ID:
<SN6PR17MB21765DFACA471FE268208D62B5600@SN6PR17MB2176.namprd17.prod.outlook.com>

Accept-Language: en-US

Content-Language: en-US

X-MS-Has-Attach:

X-MS-TNEF-Correlator:

authentication-results: spf=none (sender IP is)

x-originating-ip: [209.212.21.210]

x-ms-publictraffictype: Email

x-ms-office365-filtering-correlation-id: a8037749-e096-4752-8402-08d75d6555f0

x-ms-traffictypediagnostic: SN6PR17MB2526:

x-microsoft-antispam-prvs:
<SN6PR17MB2526F487ED7C4658FD49F1A5B5600@SN6PR17MB2526.namprd17.prod.outlook.com>

x-ms-oob-tlc-oobclassifiers: OLM:9508;

x-forefront-prvs: 02065A9E77

x-forefront-antispam-report:
SFV:NSPM;SFS:(10009020)(396003)(346002)(376002)(39860400002)(366004)(136003)(51744003)(189003)(199004)(2906002)(14444005)(186003)(55016002)(4744005)(8676002)(478600001)(81166006)(81156014)(2501003)(7736002)(99286004)(256004)(33656002)(6116002)(486006)(26005)(66446008)(54896002)(64756008)(476003)(76116006)(66556008)(9686003)(7696005)(102836004)(3846002)(66476007)(6436002)(6506007)(52536014)(4326008)(14454004)(86362001)(10998605)(8936002)(561944003)(71190400001)(71200400001)(19627405001)(74316002)(66946007)(105004)(54906003)(555904003)(316002)(88552002)(786003)(5640700003)(5660300002)(66066001)(25786009)(75432002);DIR:OUT;SFP:1101;S

CL:1;SRVR:SN6PR17MB2526;H:SN6PR17MB2176.namprd17.prod.outlook.com;FPR:;
SPF:None;LANG:en;PTR:InfoNoRecords;MX:1;A:1;

received-spf: None (protection.outlook.com: waldenu.edu does not
designate

 permitted sender hosts)

x-ms-exchange-senderadcheck: 1

x-microsoft-antispam: BCL:0;

x-microsoft-antispam-message-info:
zRLCOeK6aa3rQfok8IaUcvMtrg3VUy90qr0T/wQs9Nn5huSlU49l568dyyp2AzGJWPDrm+r
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viM2hOvwmKV7WukxHw9z2Xdc7hNTqXBPaelbYGEW6eckNpscHc83t3iqy7dmAG46Sgg5EN+
d5erALMW+Tt2yt5hKwIE34sAkICMaaRtFT3BN/Mvcc15Ij7wxkIhqCSaQYMePlu8VsCZMU8
FG+1gLySweiz8iGILUyxyVfWnvtNbGI/wnYfoI0tX2L6FbrZgL/PVD0lRmso0c+ONki9nfY
bWikLu7ryQSIRZ8DDbGpeQbPwrCWKYZ0U0wY3wLJOfbZszAsQiN6b0a3yN/8groWmWQNO3m
I+lgaPLUQJI7AxK4+l35SC

x-ms-exchange-transport-forked: True

Content-Type: multipart/alternative;

boundary="_000_SN6PR17MB21765DFACA471FE268208D62B5600SN6PR17MB2176namp_
"

MIME-Version: 1.0

X-OriginatorOrg: waldenu.edu

X-MS-Exchange-CrossTenant-Network-Message-Id: a8037749-e096-4752-8402-
08d75d6555f0

X-MS-Exchange-CrossTenant-originalarrivaltime: 30 Oct 2019
18:16:51.0350

 (UTC)

X-MS-Exchange-CrossTenant-fromentityheader: Hosted

X-MS-Exchange-CrossTenant-id: 7e53ec4a-d325-4228-9e0e-a55a6b8892d5

X-MS-Exchange-CrossTenant-mailboxtype: HOSTED

X-MS-Exchange-CrossTenant-userprincipalname:
tvPW30Ze1m2JkJS7aI5Tq9+gNlUq+CzABlncSmGr7KIvNe84Pb5dYvtWBQlFsP6trk8E841
sb6GlFYEF+uCyrP/wycpCoi5Mue3PgeIQTAQ=

X-MS-Exchange-Transport-CrossTenantHeadersStamped: SN6PR17MB2526

Sacha Morris-Dorsey

Wednesday, October 30, 2019 2:16

Oct. 30, 2019

To whom it may concern:
My name is Sacha Morris-Dorsey and I am currently enrolled at Walden University as a doctoral student in the School of Psychology. I am in the dissertation proposal phase. I would like to gain access to your assessment, Body-Esteem Scale for Adolescents and Adults, to use in my dissertation research.

My dissertation is on Body Satisfaction, Self-Efficacy, and Obesity in 18-24 years old African American women in enrolled in college. I plan to get participants from Kean University and Walden's Participant Pool. Thank you for your time and consideration.

Sacha Morris-Dorsey

permission to use BESAA

Sacha Morris-Dorsey

Thursday, October 31, 2019 4:26 PM

1st Attempt for BESAA

From: Microsoft Outlook <MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@alaureatena.onmicrosoft.com>
Sent: Monday, October 28, 2019 12:28 PM
To:
Subject: Undeliverable: permission to use BESAA

Delivery has failed to these recipients or groups:

Your message couldn't be delivered. The Domain Name System (DNS) reported that the recipient's domain does not exist.
Contact the recipient by some other means (by phone, for example) and ask them to tell their email admin that it appears that their domain isn't properly registered at their domain registrar. Give them the error details shown below. It's likely that the recipient's email admin is the only one who can fix this problem.
For more information and tips to fix this issue see this article: https://go.microsoft.com/fwlink/?LinkId=389361.

Diagnostic information for administrators:
Generating server: SN6PR17MB2096.namprd17.prod.outlook.com
mmendelson@psych.mcgill.c
Remote Server returned '550 5.4.310 DNS domain does not exist [Message=InfoDomainNonexistent] [LastAttemptedServerName= [BY2NAM05FT035.eop-nam05.prod.protection.outlook.com]'
Original message headers:


```
ARC-Seal: i=1; a=rsa-sha256; s=arcselector9901; d=microsoft.com;
cv=none;


b=mOn6qqCQwPoYCrzYMW05W3MuMHuY2zm4oVORmCK/ORP/Qh3RpyON+u1qoL6I41XgNSBrk
rEkyKtcQdTibCBLrrK44ICDACN73kbrEK08QkLQxCYBkl/Cpd8gRtRTZm8AgpBZa/wxv/pt
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ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed;
d=microsoft.com;

 s=arcselector9901;

 h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-
Exchange-SenderADCheck;

 bh=7qoCd2QvhlVq94z4vdczUtUE54elxG+gt8DwIPM5Qi8=;


b=Hv2JZVoBjgRKwrCVLnn9LgYPstNEntjiWN8uqsEAIU0dzBvD9Bd3q8X/YTuBY1ZaKAWD4
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DJP5ueuTdirWYXwT9MGXZAqfMsSZjLRsbzCgscyRD+MgteNgdZu7cN1MGibP1FoV6F+6P/l
cRDI9+qI9L65v00IcopelEnaJKw3qlpX4C7oQGYharo8YxqmaA7D6eccS4MOp0XBauyiGIn
zpPavoatBwACdGHnGCTU8K3XlraH7HyAB+0gDudEH2DkzQ/KsAVp1N+IgrAQ==
```

ARC-Authentication-Results: i=1; mx.microsoft.com 1; spf=pass

 smtp.mailfrom=waldenu.edu; dmarc=pass action=none
header.from=waldenu.edu;

 dkim=pass header.d=waldenu.edu; arc=none

DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;

 d=alaureatena.onmicrosoft.com; s=selector2-alaureatena-onmicrosoft-
com;

 h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-
Exchange-SenderADCheck;

 bh=7qoCd2QvhlVq94z4vdczUtUE54elxG+gt8DwIPM5Qi8=;

b=lfdtG3jUa7gDPqmCkmS1jqp6YZo+Din08yGq1frw4z7l9w41liu2vfDWyVNl6gTQ6l7lI
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pNLif8vtEC74NVGGH7dtbSHo+/1DG+Q=

Received: from SN6PR17MB2176.namprd17.prod.outlook.com (52.135.87.27)
by

 SN6PR17MB2096.namprd17.prod.outlook.com (52.135.86.159) with Microsoft
SMTP

 Server (version=TLS1_2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384)
id

 15.20.2387.22; Mon, 28 Oct 2019 16:28:25 +0000

Received: from SN6PR17MB2176.namprd17.prod.outlook.com

 ([fe80::9190:7e62:5e0d:26a4]) by
SN6PR17MB2176.namprd17.prod.outlook.com

 ([fe80::9190:7e62:5e0d:26a4%5]) with mapi id 15.20.2387.025; Mon, 28
Oct 2019

 16:28:25 +0000

Subject: permission to use BESAA

Thread-Topic: permission to use BESAA

Thread-Index: AQHVjayJuK/m+lHbVUaY/yKBMPh+uQ==

Date: Mon, 28 Oct 2019 16:28:25 +0000

Message-ID:
<SN6PR17MB2176A58ACB8969660DAAA439B5660@SN6PR17MB2176.namprd17.prod.outlook.com>

Accept-Language: en-US

Content-Language: en-US

X-MS-Has-Attach:

X-MS-TNEF-Correlator:

authentication-results: spf=none (sender IP is)

 smtp.mailfrom

x-originating-ip: [205.148.51.11]

x-ms-publictraffictype: Email

x-ms-office365-filtering-correlation-id: ddf24197-bf81-46d0-0aa4-
08d75bc3dbad

x-ms-traffictypediagnostic: SN6PR17MB2096:

x-microsoft-antispam-prvs:
<SN6PR17MB2096031F2A3F3FE62B822145B5660@SN6PR17MB2096.namprd17.prod.outlook.com>

x-ms-oob-tlc-oobclassifiers: OLM:9508;

x-forefront-prvs: 0204F0BDE2

x-forefront-antispam-report:
SFV:NSPM;SFS:(10009020)(366004)(376002)(346002)(396003)(136003)(3986040
0002)(199004)(189003)(51744003)(9686003)(109986005)(33656002)(64756008)
(66556008)(66476007)(6436002)(55016002)(66946007)(5640700003)(561944003
)(4326008)(54896002)(105004)(186003)(26005)(555904003)(25786009)(474400
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80700005)(786003)(7736002)(74316002)(476003)(88552002)(14444005)(290600
2)(19627405001)(256004)(486006)(6506007)(5660300002)(75432002)(66446008
)(86362001)(71190400001)(99286004)(71200400001)(7696005)(81166006)(7611
6006)(81156014)(102836004)(52536014)(8676002)(8936002)(66066001);DIR:OU
T;SFP:1101;SCL:1;SRVR:SN6PR17MB2096;H:SN6PR17MB2176.namprd17.prod.outlo
ok.com;FPR:;SPF:None;LANG:en;PTR:InfoNoRecords;A:1;MX:1;

received-spf: None (protection.outlook.com: waldenu.edu does not
designate

 permitted sender hosts)

x-ms-exchange-senderadcheck: 1

x-microsoft-antispam: BCL:0;

x-microsoft-antispam-message-info:
iEOU0PYujSv4TbbOnVZRGsUVneKOhfkHXLTaol1FggKtEKYS1AIGsQX90ZX3e7fa0c2SF0y
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8RqvUul+hQ8wBQhyViBUo6

x-ms-exchange-transport-forked: True

Content-Type: multipart/alternative;

boundary="_000_SN6PR17MB2176A58ACB8969660DAAA439B5660SN6PR17MB2176namp_
"

MIME-Version: 1.0

X-OriginatorOrg: waldenu.edu

X-MS-Exchange-CrossTenant-Network-Message-Id: ddf24197-bf81-46d0-0aa4-
08d75bc3dbad

X-MS-Exchange-CrossTenant-originalarrivaltime: 28 Oct 2019
16:28:25.8005

 (UTC)

X-MS-Exchange-CrossTenant-fromentityheader: Hosted

X-MS-Exchange-CrossTenant-id: 7e53ec4a-d325-4228-9e0e-a55a6b8892d5

X-MS-Exchange-CrossTenant-mailboxtype: HOSTED

X-MS-Exchange-CrossTenant-userprincipalname:
hp8OEDcdG+bXzjOeHTBDHuQPSjtb6gZuonN2/cRYdO3JkinUVSA5gfoUqIlGA/yvJkdDuMP
DwDv2Q5oPfRinSOzu+DkRcSYpTmRgWwY/x1c=

X-MS-Exchange-Transport-CrossTenantHeadersStamped: SN6PR17MB2096

Sacha Morris-Dorsey

Actions

To:

Cc:

Monday, October 28, 2019 12:28 PM

Oct. 28, 2019

To whom it may concern:
My name is Sacha Morris-Dorsey and I am currently enrolled at Walden University as a doctoral student in the School of Psychology. I am in the dissertation proposal phase. I would like to gain access to your assessment, Body-Esteem Scale for Adolescents and Adults, to use in my dissertation research.

My dissertation is on Body Satisfaction, Self-Efficacy, and Obesity in 18-24 years old African American women in enrolled in college. I plan to get participants from Kean University and Walden's Participant Pool. Thank you for your time and consideration.

Sacha Morris-Dorsey

Microsoft Outlook
Thu 10/24/2019 8:58 AM

.

Permission for assessment BESAA

25 KB

Your message to couldn't be delivered.

sacha.morris-dorsey	Office 365	
Action Required		Recipient

Unknown To address

How to Fix It

The address may be misspelled or may not exist. Try one or more of the following:

- Send the message again following these steps: In Outlook, open this non-delivery report (NDR) and choose **Send Again** from the Report ribbon. In Outlook on the web, select this NDR, then select the link "**To send this message again, click here.**" Then delete and retype the entire recipient address. If prompted with an Auto-Complete List suggestion don't select it. After typing the complete address, click **Send**.
- Contact the recipient (by phone, for example) to check that the address exists and is correct.
- The recipient may have set up email forwarding to an incorrect address. Ask them to check that any forwarding they've set up is working correctly.
- Clear the recipient Auto-Complete List in Outlook or Outlook on the web by following the steps in this article: Fix email delivery issues for error code 5.1.1 in Office 365, and then send the message again. Retype the entire recipient address before selecting **Send**.

If the problem continues, forward this message to your email admin. If you're an email admin, refer to the **More Info for Email Admins** section below.

Was this helpful? Send feedback to Microsoft.

More Info for Email Admins

Status code: 550 5.1.1

This error occurs because the sender sent a message to an email address outside of Office 365, but the address is incorrect or doesn't exist at the destination domain. The error is reported by the recipient domain's email server, but most often it must be fixed by the person who sent the message. If the steps in the **How to Fix It** section above don't fix the problem, and you're the email admin for the recipient, try one or more of the following:

The email address exists and is correct - Confirm that the recipient address exists, is correct, and is accepting messages.

Synchronize your directories - If you have a hybrid environment and are using directory synchronization make sure the recipient's email address is synced correctly in both Office 365 and in your on-premises directory.

Errant forwarding rule - Check for forwarding rules that aren't behaving as expected. Forwarding can be set up by an admin via mail flow rules or mailbox forwarding address settings, or by the recipient via the Inbox Rules feature.

Mail flow settings and MX records are not correct - Misconfigured mail flow or MX record settings can cause this error. Check your Office 365 mail flow settings to make sure your domain and any mail flow connectors are set up correctly. Also, work with your domain registrar to make sure the MX records for your domain are configured correctly.

For more information and additional tips to fix this issue, see Fix email delivery issues for error code 550 5.1.1 in Office 365.

Original Message Details

Created Date:	10/24/2019 12:58:11 PM
Sender Address:	
Recipient Address:	
Subject:	Permission for assessment BESAA

Error Details

Reported error:	*550 5.1.1... User unknown*
DSN generated by:	SN6PR17MB2173.namprd17.prod.outlook.com
Remote server:	

Message Hops

HOP	TIME (UTC)	FROM	TO	WITH
1	10/24/2019 12:58:11 PM	SN6PR17MB2176.namprd17.prod.outlook.com	SN6PR17MB2176.namprd17.prod.outlook.com	mapi
2	10/24/2019 12:58:11 PM	SN6PR17MB2176.namprd17.prod.outlook.com	SN6PR17MB2173.namprd17.prod.outlook.com	Microsoft SMTP Server (ve cipher=TLS_ECDHE_RSA_

Original Message Headers


```
ARC-Seal: i=1; a=rsa-sha256; s=arcselector9901;
d=microsoft.com; cv=none;


b=WpWMEoKektQiuCSoDYx+ODkI04loNx2G8/bcsPd+jW++tuD2hYXf7H5C4GyM
+/mk3Bl2f4VJlzXPiytGuwxkuplSwf4a5bjGNMpEVkV2zBZ40qJ48m8T6XTX6Q
MjSBPmGpmGKhHXspPfriBJreVMOYnoaQO03BzRFtkJqDzCzI5PrKIz50tE1E5G
a01MwtOT49wzpQ9Fe6hLrZpsT14a6xn3iB7a36JpdpBCS5PTmV/LeRqYX8KkEs
PqTFD+EG1R0uv578u+Qj898QwRZ3PtClmDEFcOx0H29ljBbmGzAtmxmlk4LYLy
yVjDER5MOGwJNtuvVp5Tii4DDt9ocDxT2A==

ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed;
d=microsoft.com;

 s=arcselector9901;

 h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-
MS-Exchange-SenderADCheck;

 bh=rspjWbl+alSpiZ+f7Nr1zYElmsIafB/5q2M85ynUfe8=;


b=AvxiBIh9hje8HcRv/NfNlZ72SxqI0d+XP/PMe2w1zz6XxvrHFxuAPLiPyzid
ZD8Q7Y7m5qafZF4XIaQ41+/+cK8PKPgFXEHOvfTxEJK9AdnJVIbzinOEWXqKwI
vGm8mQZUwvho8INuvTa3AoS2dOcKrYmga31Ter4DElIxZpqh24cLU1ADpXlXXT
C+6kKj7CPtVyZQhOt+hsI//wM0zt321KmMqc5B5An4N8a4fiesKsF4azr4yX8t
Oi3iJmmSofeiRTz6pTqVLgc29vIZCxAVP0FZ/Mtw9Vmserop32QvH5nNlsIObF
8BvUq1g3kpR1A14QT0G6uEhZthJwvIeYqA==

ARC-Authentication-Results: i=1; mx.microsoft.com 1; spf=pass

 smtp.mailfrom=waldenu.edu; dmarc=pass action=none
header.from=waldenu.edu;
```

dkim=pass header.d=waldenu.edu; arc=none

DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;

d=alaureatena.onmicrosoft.com; s=selector2-alaureatena-onmicrosoft-com;

h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-Exchange-SenderADCheck;

bh=rspjWbl+alSpiZ+f7Nr1zYElmsIafB/5q2M85ynUfe8=;

b=InvNy8lsvsM3NYps+AyWBlc2Z+lbf+SlzsVMfdjpdcS+4iW3f8UNbO/S+AFjpt1zGJBKFAH/i4TUTb478m6d9sV04xbpC5EmSmwlMOnnEndQiLAFXUa+JpB7HmrKVFGWc7YMBGnrRSZUaBqmKVXnQMS/RYFbUiK8CwIEJNc1eYk=

Received: from SN6PR17MB2176.namprd17.prod.outlook.com (52.135.87.27) by

SN6PR17MB2173.namprd17.prod.outlook.com (52.135.87.24) with Microsoft SMTP

Server (version=TLS1_2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384) id

15.20.2387.23; Thu, 24 Oct 2019 12:58:11 +0000

Received: from SN6PR17MB2176.namprd17.prod.outlook.com

([fe80::d6a:587d:9537:fc0b]) by SN6PR17MB2176.namprd17.prod.outlook.com

([fe80::d6a:587d:9537:fc0b%5]) with mapi id 15.20.2367.025; Thu, 24 Oct 2019

12:58:11 +0000

Subject: Permission for assessment BESAA

Thread-Topic: Permission for assessment BESAA

Thread-Index: AQHVimo9mHjoagBh7keK71wpQe7ocg==

Date: Thu, 24 Oct 2019 12:58:11 +0000

Message-ID:
<SN6PR17MB2176B87082ABED605D3B5AA6B56A0@SN6PR17MB2176.namprd17
.prod.outlook.com>

Accept-Language: en-US

Content-Language: en-US

X-MS-Has-Attach:

X-MS-TNEF-Correlator:

authentication-results: spf=none (sender IP is)

x-originating-ip: [75.127.180.58]

x-ms-publictraffictype: Email

x-ms-office365-filtering-correlation-id: e3cac489-41b4-4586-
cd29-08d75881d341

x-ms-traffictypediagnostic: SN6PR17MB2173:

x-microsoft-antispam-prvs:
<SN6PR17MB2173902D564737EE420914E5B56A0@SN6PR17MB2173.namprd17
.prod.outlook.com>

x-ms-oob-tlc-oobclassifiers: OLM:9508;

x-forefront-prvs: 0200DDA8BE

x-forefront-antispam-report:
SFV:NSPM;SFS:(10009020)(366004)(39860400002)(136003)(376002)(3
96003)(346002)(51744003)(189003)(199004)(19627405001)(316002)(
296002)(786003)(81166006)(86362001)(1730700003)(8676002)(81156
014)(561944003)(25786009)(33656002)(54896002)(256004)(14444005
)(55016002)(2501003)(9686003)(2351001)(7736002)(6916009)(54906

003)(555904003)(4326008)(478600001)(66066001)(476003)(6436002)
(4744005)(7696005)(5640700003)(8936002)(2906002)(88552002)(525
36014)(6116002)(3846002)(14454004)(75432002)(186003)(91956017)
(71190400001)(76116006)(71200400001)(5660300002)(64756008)(743
16002)(66556008)(105004)(6506007)(66446008)(99286004)(34807000
05)(486006)(26005)(102836004)(66946007)(66476007);DIR:OUT;SFP:
1101;SCL:1;SRVR:SN6PR17MB2173;H:SN6PR17MB2176.namprd17.prod.ou
tlook.com;FPR:;SPF:None;LANG:en;PTR:InfoNoRecords;MX:1;A:1;

received-spf: None (protection.outlook.com: waldenu.edu does
not designate

 permitted sender hosts)

x-ms-exchange-senderadcheck: 1

x-microsoft-antispam: BCL:0;

x-microsoft-antispam-message-info:
NWkG5PaAvTfo7rZD+ThrYmlPXcnecTcnPDRQwM6sZEp9gAegYId9quJYqNS/Py
tyhRPsecFiVCS/f+nR7QrV8vqHoM123Lta7/GW+/8CBCnD26ikqUXsQShgYmMb
zzUPnqwOY2p3wDw8VgBJfBrz90EgfZJhpMtGIf8kDAzdDy0nMOUa1T8tnSr1zd
zL2b0+SZEB0hbl6Wt59uJ5i5ZONumQjgdQ++L+lvLc2aooEeUnggB9d403ZsJt
tK2EbLl8su3IcdEUzodbAE98uJKN/DLm7zz+xv2g4Mk/9iEn71IBTq5rF+874q
wzs1iGi5NfFjBzW/BCllJnt8Gz4C+VrDJH5WGy/DtiVpppEDwy2BDrbxjRsiJ5
J0kdU6QPORqPoFmbQpd9Df67M1rkaE0R4yumDfnHGZGBy5iIAYNljd4Yw29s9V
fR2P+JoBmPhmJx

x-ms-exchange-transport-forked: True

Content-Type: multipart/alternative;

boundary="_000_SN6PR17MB2176B87082ABED605D3B5AA6B56A0SN6PR17MB
2176namp_"

MIME-Version: 1.0

X-OriginatorOrg: waldenu.edu

X-MS-Exchange-CrossTenant-Network-Message-Id: e3cac489-41b4-
4586-cd29-08d75881d341

X-MS-Exchange-CrossTenant-originalarrivaltime: 24 Oct 2019
12:58:11.3165

(UTC)

X-MS-Exchange-CrossTenant-fromentityheader: Hosted

X-MS-Exchange-CrossTenant-id: 7e53ec4a-d325-4228-9e0e-a55a6b8892d5

X-MS-Exchange-CrossTenant-mailboxtype: HOSTED

X-MS-Exchange-CrossTenant-userprincipalname: i9UQgrO4t2MJBVRtTYzjJIDKCUCs33malbmnhEFPy2vMItdfDoAo3dTcLZXHIsZO9MEXcxPZ7iAsUkflkMJRhPtB5Cshn+RA0W1ijDlOmdk=

X-MS-Exchange-Transport-CrossTenantHeadersStamped: SN6PR17MB2173

SM

Sacha Morris-Dorsey
Thu 10/24/2019 8:58 AM

Oct. 24, 2019

To whom it may concern:
My name is Sacha Morris-Dorsey and I am currently enrolled at Walden University as a doctoral student in the School of Psychology. I am in the dissertation proposal phase. I would like to gain access to your assessment, Body-Esteem Scale for Adolescents and Adults, to use in my dissertation research.

My dissertation is on Body Satisfaction, Self-Efficacy, and Obesity in 18-24 years old African American women in enrolled in college. I plan to get participants from Kean University and Walden's Participant Pool. Thank you for your time and consideration.

Sacha Morris-Dorsey

Appendix G: Body-Esteem Scale for Adolescents and Adults

Body-Esteem Scale for Adolescents and Adults PsycTESTS

Citation: Mendelson, B. K., Mendelson, M. J., & White, D. R. (1997). Body-Esteem Scale for Adolescents and Adults [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/t00047-000

Instrument Type: Rating Scale Test Format: 5-point scale to indicate how frequency of agreement (0 = never; 1 = seldom; 2 = sometimes; 3 = often; and 4 = always).

Source: Reproduced by permission from: Jónsdóttir, Silja Rut, Arnarson, Eiríkur Örn, & Smári, Jakob (2008). Body esteem, perceived competence and depression in Icelandic adolescents. Nordic Psychology, Vol 60(1), 58-71. doi: https://dx.doi.org/10.1027/1901-2276.60.1.58

Permissions: Contact Publisher and Corresponding Author. doi: 10.1037/t00047-000

Message Hops

HOP	TIME (UTC)	FROM	TO	WITH
1	10/30/2019 6:08:22 PM	SN6PR17MB2176.namprd17.prod.outlook.com	SN6PR17MB2176.namprd17.prod.outlook.com	mapi

2	10/30/2019 6:08:22 PM	SN6PR17MB2176.namprd17.prod.outlook.com	SN6PR17MB2557.namprd17.prod.outlook.com	Microsoft SMTP Se cipher=TLS_ECDHE

Original Message Headers


```
ARC-Seal: i=1; a=rsa-sha256; s=arcselector9901; d=microsoft.com; cv=none;

b=gPgpRMlHRZZWaFKGvDyfQAovjXlDQdpQ4bnEDCV79gwApNbLVeEiy8GlzWsg2ycehuHV9cDvZWHy+XwnAYq+QDa
s5hBkaaVkczMzkcNSe0np5QD5Hm4O8FghFhpEz6+tXBicVgLY3Io9Yq1LeoQhaGK6FjlapDG/BuX/BGuH45TrgUzp
lVYq3bLFYe/8QkyGGP7rdCcrc/yHuB/pLmwnmhpVvzEjj4CCbvf5gdxaLBEDyPIS+TQKsUTprkXH8ZhCNAReVFYNH
PhQLbHBEB/zWyDCg2o+BxHdcVLDkGhNbEuAYMUrL8CJK778/gVeDElmauYMCPiG8MPuP+bg0xxV+w==

ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed; d=microsoft.com;

 s=arcselector9901;

 h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-Exchange-SenderADCheck;

 bh=bCGrrRmlJOA6dzMxNYLU1Y0uJkD2hU+hBOIjZ0GcL4A=;

b=nFX3RqqJtj0gLxwGo6iElGgSsC1osgkVKPqv1XCbXmuPpv60eLMxiR3C9qhUVInhE2AfNIrqDNL/hNeMB15A7OU
RytIoYuhIcKadJxqBr5+xryRQ0KEl8YyiMnMUez4wDy/eLWj8iKSGTe4kax/tSng4AeREK9HGqEJ16B5Tbzf6RuX9
Ynfl66/fHJUxV6aisvuRkLTi/JxUGyL1meW39UAnN2DNH14SuJsAvBahXhCNPKjzPb5R2n8J5TIyP2qpqcfIUljQn
recF52UaBpyuaaMHDc/gWCX7VcIxOyIr7awy1w9UsvxEdJXZFT5mCUzPSFRY8USzMFlr2xl6g9rjA==

ARC-Authentication-Results: i=1; mx.microsoft.com 1; spf=pass

 smtp.mailfrom=waldenu.edu; dmarc=pass action=none header.from=waldenu.edu;

 dkim=pass header.d=waldenu.edu; arc=none

DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;

 d=alaureatena.onmicrosoft.com; s=selector2-alaureatena-onmicrosoft-com;

 h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-Exchange-SenderADCheck;

 bh=bCGrrRmlJOA6dzMxNYLU1Y0uJkD2hU+hBOIjZ0GcL4A=;

 b=

X-MS-Exchange-CrossTenant-id: 7e53ec4a-d325-4228-9e0e-a55a6b8892d5

X-MS-Exchange-CrossTenant-mailboxtype: HOSTED

X-MS-Exchange-CrossTenant-userprincipalname:
yC0hD7enwh9q2b8eHOdP+Mx20YIf5Zli7nEgjhX5z36mdNO3MnHEORrmtEkg2aSvKmkVh465+X0DnUxrSFoVy6ey1
n3QKRqeM+0hCk2kfbA=

X-MS-Exchange-Transport-CrossTenantHeadersStamped: SN6PR17MB2557
```

Sacha Morris-Dorsey [sacha.morris-dorsey@waldenu.edu]

Actions