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# The Impact of Self-Esteem and Body Dissatisfaction on Internalized Stigma in Obese, Hispanic Women

Dorothy M. Burns
*Walden University*

# Walden University

College of Health Professions

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Dorothy M. Burns

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Dr. Carolyn Sipes, Committee Chairperson, Nursing Faculty
Dr. Mary Martin, Committee Member, Nursing Faculty
Dr. Maria Ojeda, University Reviewer, Nursing Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
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Abstract

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MBA, University of Central Florida, 2009

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Dissertation Submitted in Partial Fulfillment

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Doctor of Philosophy

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## Abstract

The current literature on self-esteem (SE), body dissatisfaction (BD) and internalized weight stigma (IWS) was limited, albeit evolving. The variables were well established across multiple domains of study: IWS was consistently noted to be a contributing factor for the development of obesity, but no studies explored the relationship between SE and BD on IWS. Therefore, the purpose of this correlational study was to explore the relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women who are 20% more likely to be overweight or obese than non-Hispanic women. The study was guided by symbolic interactionism theory, which provided context for the interpretation of SE, BD, and IWS based on societal norms for weight and obesity. Data were collected through surveys of a sample of 87 participants. Participant data points were self-reported demographic information and the summed scores of Rosenberg's Self-Esteem Scale (RSE), Body Satisfaction Scale (BSS), and the Weight Self-Stigma Questionnaire. A multiple regression analysis revealed that as BD increased by one unit, BSS ($\beta_1 = .270$), SE decreased by –.443. Conversely, as SE decreased by one unit, RSE ($\beta_2 = –.443$) BD increased by .270. BD and SE are predictors of IWS, as evidenced by a significant inverse relationship. The ANOVA indicated significance with a $p < .0.05$, establishing that there was a relationship between BD and SE on IWS. The findings of this study can be used for positive social change by creating new knowledge to identify new correlates for IWS in diverse communities, to improve health outcomes for the population, inform public policy, and advocate for improved education on obesity in ethnic communities.

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# Dedication

Thank you to my family, friends, and nursing colleagues for support and inspiration throughout this journey. A special thank you to my husband, Tom, who always believed I could…without his love and support none of this would have been possible.

# Acknowledgments

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# Chapter 1: Introduction to the Study

Obesity is the largest and costliest single risk factor for chronic disease in the United States. It affects 42.7% of the population, and the cost of caring for individuals with obesity exceeds 3.7 trillion dollars each year (Centers for Disease Control and Prevention [CDC], 2020; Waters & Graf, 2018). In the last decade, there has been a proliferation of research that suggested internalized weight stigma (IWS) is a contributing factor for the development of obesity (Essayli et al., 2017: Lee et al., 2019; Lim et al., 2019; Meadows & Higgs, 2020; Puhl et al., 2018). Researchers noted that individuals who experienced IWS have strong negative thoughts about their weight, which resulted in decreased physical, social, and mental health outcomes (Chin & Armstrong, 2019; Ciciurkaite & Perry, 2018; Grosso et al., 2019; Puhl et al., 2018; Whittle et al., 2017). In addition, researchers have explored the impacts of self-esteem (SE) and body dissatisfaction (BD) on IWS (Engur & Karagol, 2019; Kim, 2020; Lim et al., 2019). However, no current literature has measured the relationship between SE and BD and their effect on IWS or how culture influenced the experience of IWS in Hispanic women. Therefore, in this quantitative, correlational study, I examined the relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women.

In Chapter 1, I present the background and purpose of this study. The research question and hypothesis were framed using symbolic interactionism theory (SI). This theory provided a foundation to address how respondents interpreted the meaning of SE, BD, and IWS. Furthermore, I aligned the nursing metaparadigm with SI as a lens to address the interpretative meaning of SE, BD, and IWS for person, health, environment,

and nursing. This chapter also contains a discussion of the nature of the study, assumptions, scope, delimitations, and research limitations. In conclusion, I explain the significance of the study, specifically to nursing theory, practice, and social change.

## Background of the Study

Obesity is a serious global health problem that continues to increase despite multiple weight-loss interventions (Palmeira et al., 2018). The current literature provided abundant evidence that SE, BD, and IWS were strong indicators for developing and sustaining obesity in the population (Brenner et al., 2019; Chin & Armstrong, 2019; Grosso et al., 2019: Lee et al., 2019; Selensky & Carels, 2021); however, no current research investigated the association between SE and BD, its impact on IWS, or how culture influences these variables. In this quantitative, correlational study, I explored the relationship between SE and BD and their effect on IWS in obese, 30–44-year-old, Hispanic women. Statista (2021) wrote that Hispanic Americans are the fastest-growing ethnic minority in the United States. Hispanic women account for approximately 10% of the U.S. population; yet 22% of them between 30 and 44 years old are obese (Statista, 2021).

SE and BD were well established in the current nutrition, psychiatric, eating disorder, and obesity literature (Barnett et al., 2020; CDC, 2020; De Ruiter et al., 2017; Engur & Karagol, 2019; Kondratiuk, 2020; Lee et al., 2019; Opara & Santos, 2019; Puhl et al., 2017; Ruffino et al., 2018). However, a gap in the literature existed on the relationship between SE and BD and their effect on IWS. Brenner et al. (2020) stated that IWS was a significant factor in the development of obesity and noted that individuals

who experience overt acts of prejudice or discrimination, feeling of devaluation, or internalized stigma were at higher risk of low SE and BD. Age also plays a significant role in level of BD an individual might experience. The age group chosen for this study was the result of the current literature. Winter et al. (2019) wrote that BD occurs during late adolescents and lasts through young adulthood as young women struggle with their changing identity, from teenager to young adult. Additionally, although stable through adulthood, BD lasts well into late adulthood. Barnett et al. (2020) wrote that older adults are not as concerned with body image, but rather place greater emphasis on their health and physical abilities.

Internalized stigma originates from an individual's belief of self-devaluation, low SE, or possession of the attributes of a known stigmatized group (Grosso et al., 2019; Whittle et al., 2017). Individuals often feel shame, worthlessness, and both highly visible and invisible about their weight (De Ruiter et al., 2017; Ibrahim et al., 2019; Whittle et al., 2017). IWS was linked to poorer health outcomes and decreased interactions with health care providers (Chin & Armstrong, 2019; Whittle et al., 2017). Additionally, internalized stigma was responsible for decreased socialization, feelings of shame, prejudice, discrimination, and stereotyping (Blumer, 1969; Goffman, 1963; Grosso et al., 2019; Whittle et al., 2017).

Rosenberg (1979) found that the development of self-concept was responsible for forming SE and BD early in an individual's life, beginning with their recognition of a self-conscious person. The concept of self-consciousness was challenging to explain because it involves the complicated and multilevel functioning of the brain. More than a

century after self-consciousness was first described by James (1890), there is still little agreement among the social sciences on its definition because each discipline perceives self-consciousness from its unique worldview. For instance, behaviorists believe self-consciousness is actualized through behavior; psychoanalysts subscribe to a Freudian psychodynamic approach, and interactionists view self-consciousness through a lens of interpretative and shared meaning (Kondratiuk, 2020).

Kondratiuk (2020) described a philosophical viewpoint where self-consciousness was conceptualized as a multilayered, integrated process that includes personality, self-awareness, and SE. Furthermore, Kondratiuk noted that self-consciousness developed incrementally from birth as a person learns to recognize themself as separate from others. In a seminal work on psychology, James (1890) wrote that self-consciousness is a set of psychological processes that receive experiences, perceive the self, and establish a personality. Self-consciousness begins at birth, matures through early childhood, and is responsible for forming SE by around age 7 (Kondratiuk, 2020; Lee et al., 2019; Rosenberg, 1979). Early in life, children's positive or negative experiences play a significant role in developing identity and SE. The perception of the self by others is foundational to the development of identity and SE (James, 1890). Therefore, an individual's early adverse experiences related to weight, shape, or characteristics of their body often result in low SE, poor body image, body dysmorphia, or BD (Barnett et al., 2020; De Ruiter et al., 2017; Kondratiuk, 2020; Meadows & Higgs, 2020; Ruffino et al., 2018)

Opara and Santos (2019) described BD as a person's negative subjective evaluation of their physical body and an over scrutinizing of their body parts, such as weight, figure, hip, or breast size. Ruffino et al. (2018) stated that BD is a person's heightened negative perception of themself, beginning with a distorted body image. The researchers noted that because weight is a highly stigmatized condition, individuals experience varying levels of external prejudice and discrimination based on society's beliefs and values about obesity (Ruffino et al., 2018).

## Problem Statement

The specific research problem addressed by this study was the relationship between SE and BD and their effect on IWS in obese, 30–44-year-old, Hispanic women. Obesity is a global problem affecting all aspects of an individuals' physical, social, and psychological well-being (CDC, 2020; Ciciurkaite & Perry, 2018; Grosso et al., 2019). Current research indicated that obese adults suffer from increased psychological distress, depression, anxiety, and social isolation (CDC, 2020; Ruffino et al., 2018). Additionally, obesity increases the risk of developing chronic diseases, like hypertension, stroke, cancers, cardiovascular disease, and Type 2 diabetes (CDC, 2020).

I found a gap in the literature on the relationship between SE and BD, its impact on IWS, and how culture influences the development and sustainability of obesity. Additionally, Hispanic women are severely underrepresented in the literature; yet, they are disproportionately affected by obesity. Statista (2021) noted that 6.38 million Hispanic women aged 30–44 years living in the United States are obese. The CDC (2019)

reported that they are 20% more likely to be overweight or obese than non-Hispanic women (Statista, 2021).

Positive social change may be created through research that explores what is relevant in and to a population. Culturally relevant studies inform treatment and interventions that help to create diverse, equitable care for everyone. Cultural competence demands that people's values, beliefs, and traditions be respected and accounted for when developing strategies to improve the health of the individual, the community, and the population.

## Purpose of the Study

The purpose of this quantitative, correlational study was to assess the relationship between the independent variables, SE and BD, on the dependent variable of IWS in a sample of 30–44-year-old, obese, Hispanic women. I used multiple linear regression to analyze the strength and direction of the relationship between the predictor variables on the dependent variable. The data points for this study were demographic data and the summed scores of three validated instruments, Rosenberg's Self-Esteem Scale, (RSE) the Body Satisfaction Scale, (BSS), and the Weight Self-Stigma Questionnaire (WSSQ; see Lillis et al., 2010; Rosenberg, 1965;1989; Slade et al., 1990). Participants were recruited by invitation through the internet using SurveyMonkey and social media (i.e., Facebook) groups. The survey was open to all women willing to participate who met the inclusion criteria discussed later in this chapter.

## Research Question and Hypotheses

The research question was: What was the relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women?

$H_0$: There was no relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women.

$H_a$: There was a relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women.

I designed this study to gather data using an internet survey to assess the perceptions, attitudes, and beliefs of SE, BD, and IWS in a sample of 30–44-year-old, obese, Hispanic women. The current literature was limited on the association between SE, BD, and IWS, and no current research had explored the relationship between the variables, regardless of gender, race, or age.

Participants who met the inclusion criteria provided demographic data via SurveyMonkey. The demographic data included current body mass index (BMI), age, ethnicity, level of education, number of years living with obesity, and current enrollment status in a commercial or medical weight loss program. Additionally, each participant completed the following three validated instruments found in the current literature. The WSSQ is a 12-question survey to identify individuals who would benefit from stigma reduction interventions (Lillis et al., 2010). The RSE is a self-reported, 10-item scale to measure the participant's feelings of self-worth and self-acceptance (Rosenberg, 1965, 1989), and the BSS is a 16-item, self-reported tool to evaluate the participant's satisfaction with their body parts (Slade et al., 1990). The survey tools are well

established in the literature, and all have proven reliability and validity, which are discussed in greater detail in Chapter 3 (see Lillis et al., 2010; Rosenberg, 1965, 1989; Slade et al., 1990).

## Theoretical Foundation

The theories and concepts that grounded this study were borrowed from sociology. SI has framed past nursing research that explored social inequities, human interaction behaviors, health promotion, and intent to seek care in patients with chronic disease (McEwen & Wills, 2019). The theory was formalized by Blumer (1969) and born from the philosophical traditions of pragmatism. Blumer's theory was heavily influenced by the writings and pragmatic viewpoints held by James (1890), Dewey (1930), Mead (1934), Thomas (1937), Weber (1947), and Goffman (1963; Stryker, 1980). This theoretical framework provided a foundation from which to investigate the dynamic interpretive social meaning of SE and BD, and their impact on IWS. The concepts, relationships, and assumptions of SI also align with the nursing metaparadigm. Therefore, the borrowed sociological theory of SI provided greater relevance to nursing theory when viewed through a lens of person, health, environment, and nursing (McEwen & Wills, 2019).

The concepts of SI are *actors*, who are individuals or groups; actors who assume *roles* within a group; *symbols*, which are the positive or negative gestures of the actors; and *objects*, which have symbolic meaning through social interactions with actors (Blumer, 1969). Socially constructed meaning results from subjective interpretations by others (Blumer, 1969). SI is a label used to explain the interpretive dynamics within a

group based on three assumptions: (a) human beings act towards things based on meaning, (b) the meaning of things is derived from or arises from social interactions with others, and (c) individuals use an interpretive process to understand and modify the meaning of things (Blumer, 1969).

Additionally, there are logical connections between the nature of this study and the alignment of concepts and assumptions of the nursing metaparadigm and the SI framework. The concepts of SI and the nursing metaparadigm are interactions and interpretations of symbols, objects, roles, and actors; therefore, SE and BD are objects in the *environment* created by the shared meaning and social interactions with others (Blumer, 1969). Symbols are the positive and negative gestures that solicit a shared response from others, which can only exist if an individual perceives and responds to them (Blumer, 1969). Therefore, these positive or negative symbols represent the thoughts and perceptions of a person's self-worth and IWS. Actors are *persons* or groups who experience positive or negative thoughts about objects because of the group's interpretations and labels of weight. In this study, the actor's *health* may be negatively impacted by the relationship of objects and symbols represented by SE, BD, and IWS in 30–44-year-old, obese, Hispanic women. Actors shape their roles in response to the interpretations of symbols and objects (Blumer, 1969). *Nurses* play a role in providing *education, intervention,* and *advocacy* to improve the health of actors.

## Nature of the Study

In this quantitative study, I used a correlational design and multiple linear regression analysis to determine the relationship between the predictor variables of SE

and BD and the dependent variable of IWS in the targeted sample population. G*Power 3.1 power analysis was used to calculate the appropriate sample and effect size (see Softpedia, 2020). The analysis for a medium effect size of 0.15, an alpha of 0.05, and a power of 0.8 yielded a total sample size of 68 participants required to detect a medium effect. The final sample was $N = 87$. I recruited the sample of obese, Hispanic women aged 30–44 years through the internet using SurveyMonkey and social media (Facebook) groups. Participants provided demographic information and completed the RSE, BSS, and WSSQ instruments that assessed their responses about SE, BD, and IWS (see Lillis et al., 2010; Rosenberg, 1965, 1989; Slade et al., 1990).

Participants read and attested to several statements about the research process involving human subjects before taking the survey. This consent form addressed participant data confidentiality, the right to ask questions, the fact that participation was voluntary, and the participant could withdraw at any time, and how the study results would be shared (see Ravitch & Carl, 2016). A "yes" answer to Question 1 confirmed the respondent's acknowledgment of consent and acceptance to participate.

The confidentiality of data was a primary objective of the overall data management plan. I was required to protect the participants' privacy at all times. The participants were kept anonymous, and no identifying information or connections to responses was made to any data collected. The data collected were stored by SurveyMonkey and are accessible only to the account owner through a secure password. Data will be kept for at least 5 years, as required by Walden University.

Participants who met the inclusion criteria provided demographic data via SurveyMonkey that included their BMI, age, ethnicity, level of education, number of years living with obesity, and current enrollment status in a commercial or medical weight loss program. The World Health Organization (2020) definition of obesity is a BMI greater than 30. Participants calculated their BMI using an embedded height and weight chart (see World Health Organization, 2020). Additionally, each participant completed 38 questions from three validated instruments; 10 questions from the RSE, 16 questions included in the BSS, and 12 questions from the WSSQ. The survey instruments are well established in the literature, easy to read, and have high validity and reliability (Lillis et al.,2010; Rosenberg, 1965, 1989; Slade et al., 1990). The total time to take the survey was estimated at 15 minutes by SurveyMonkey.

In the invitation to participate in the study, I explained the study purpose, design, and variables as well as provided a short description of the instruments, an approximate time to complete the survey, and the inclusion criteria. The survey was open to females with a BMI greater than 30, who identified as of Hispanic ethnicity, between the ages of 30 and 44 years, and were not currently enrolled in a commercial or medical weight loss program between August 12, 2021, and August 13, 2021. Participants excluded from this study were males and those with a BMI less than 30, non-ethnic Hispanic, younger than 30 years or older than 44 years, or currently enrolled in a medical or commercially available weight loss program. Only completed surveys meeting the inclusion criteria were included in the final analysis.

## Definitions

*Actor*: A person or group who experiences their environment through the process of interpretation. The actor identifies the meaning of things for themself and internalizes and accepts that meaning as reality (Blumer, 1969).

*BD*: An individual's negative subjective evaluation of their physical body and over scrutinizing of their body parts, such as weight, figure, hip, or breast size (Opara & Santos, 2019). Ruffino et al. (2018) explained that BD is a person's heightened negative perception of themself, beginning with a distorted body image.

*Environment*: As part of the nursing metaparadigm and interpreted through SI, the social norms of a group or society that are created through the shared meaning and interactions with others (Blumer, 1969).

*Health*: As part of the nursing metaparadigm and related to the psychological domain, it is the perception of self-worth that is either positive or negative. A negative response to self-worth is a risk factor for the development of IWS (Blumer, 1969).

*Hispanic or Latino*: A person with Cuban, Puerto Rican, South or Central American, or other Spanish heritage (Winter et al., 2020).

*IWS*: Individuals who devalue themselves because of weight; individuals who are aware of negative social stereotypes and judgments about higher weight (Meadows & Higgs, 2020). The individual must also accept the stereotype's validity, identify with the stigmatized group, and experience feelings of unworthiness or self-blame (Meadows & Higgs, 2020). Weight is a highly visible stigmatized condition where individuals

experience varying levels of external prejudice and discrimination based on society's beliefs and values of being overweight or obese (Barnett et al., 2019).

*Nursing*: A component of the nursing metaparadigm and interpreted through SI as a respected role that provides education, intervention, and advocacy to improve the health of actors shaped by the interpretation of negative symbols and objects (Blumer, 1969).

*Objects*: Created through the shared meaning and social interactions with others. SE and BD are socially constructed through the interpretive meaning of others (Blumer, 1969).

*Person*: As part of the nursing metaparadigm and interpreted through SI, part of human groups engaging in action. Individuals act singularly, in groups, or on behalf of others as representatives (Blumer, 1969).

*Role*: Actors acting in a way that is shaped by an individual or group's response to the interpretations of objects (Blumer, 1969).

*SE*: A complex psychological function of self-concept. According to Rosenberg (1979), four components are necessary for the maintenance of consistency and SE: reflected appraisal, social comparisons, self-attribution, and psychological centrality. Each of these components provides insight into the development and sustainability of an individual's SE. Rosenberg defined the components in the following ways:

- The reflected appraisal is the influence of attitudes by others, their view of others as a person, and ultimately how an individual comes to view themselves.

- Social comparisons are how individuals learn about themselves by comparing themselves with others. Additionally, the social evaluations of an individual's positive, negative, or neutral behaviors.
- Self-attribution is the repeated, internal, self-descriptive statements a person makes to themself that are either positive or negative.

Psychological centrality assumes self-concept is not a collection of parts but a complex organizational process that includes intelligence, morality, honesty, and courage essential for self-identity.

*Symbols*: The positive and negative gestures that solicit a shared response from others. They can only exist if a person can perceive and respond to them (Blumer, 1969).

## Assumptions

I made several assumptions about the study participants. One assumption was that the participants understood the meanings of SE, BD, and IWS, and they had access to a computer and the necessary skills to answer a survey. I assumed participants would answer the questions honestly and that they were Hispanic women who were fluent in English.

## Scope and Delimitations

The scope of this study was limited to a quantitative evaluation of the relationship between SE and BD and their effect on IWS in obese, Hispanic women aged 30–44 years. Obesity in the United States is at epidemic proportions, affecting almost half of the population (CDC, 2020). The Hispanic population, the fastest-growing ethnic group in

the United States, is 1.2 times more likely to be obese than non-Hispanic Whites (CDC, 2019). Hispanic women are 20% more likely to be overweight or obese than non-Hispanic women (CDC, 2019). The CDC (2019) reported that the age-adjusted obesity in Hispanic women living in the United States was higher than any other ethnic group. Therefore, participation in this study was limited to Hispanic women, 30–44-years-old, with a BMI equal to or greater than 30, who were not enrolled in a commercial or medical weight loss program.

SI provided a comprehensive framework for investigating the relationship between SE and BD and their effect on IWS in a culturally diverse group. I also aligned the concepts, relationships, and assumptions of SI with the nursing metaparadigm and its application to theory, practice, and social change. Nursing research using SI has previously framed research on social inequities, human interaction behaviors, health promotion, and intent to seek care in patients with chronic disease (McEwen & Wills, 2019).

The participants' level of acculturation limited the generalizability of this study to other populations. Altman et al. (2017) reported that highly acculturated women might not report the same findings as those who have been in the United States for a shorter time or those with high Spanish fluency. An additional limitation was the participant's complete acceptance of the U.S. beauty ideal. Less acculturated Hispanic women are affected by the collision of cultural beauty norms from their home and host countries (Opara & Santos, 2019). The level of acculturation and the participant's experience with low SE, BD, and IWS was also a delimitation of this study.

## Limitations

I noted several potential limitations, challenges, and/or barriers before data collection, including the ability to access weight support groups through the internet or social media sites because of limitations by group administrators, locked or private groups, and groups who prohibit their solicitation members. Recruitment of enough participants to meet the sample size requirement of 68 obese, Hispanic women between the ages of 30 and 44 was another potential limitation. If the number of participants could not be achieved, I would have expanded the age range to obese, Hispanic women aged 30 to 65 years. I overcame this limitation by using SurveyMonkey to target a pool of participants by ethnicity and age range.

Additional limitations included the ability of participants to access the internet or a smartphone, time to complete the survey, missing data, honest responses, enrollment in medical or commercial weight-loss programs, or factors outside the inclusion criteria that could be problematic to the final analysis. Although access and honest reporting are beyond my control, the potential barriers could have been overcome by increasing the number of respondents or delaying the survey's close until enough data were collected to overcome missing or potential overstated data. None of these limitations proved to be barriers to launching the survey or data collection.

One ethical concern I had was to *do no harm*. Participants who suffer from low SE, BD, or IWS may have increased negative thoughts about themselves and their weight during or after completing the study survey. This concern was explicitly noted in

the informed consent, and a support resource was provided. I directed participants to the Obesity Action Coalition (www.obesityaction.org) for follow-up if necessary.

## Significance of the Study

The health issue that prompted further investigation into the literature was how IWS perpetuates obesity in the United States. To create positive social change at the population health level, acknowledging that obesity is a multifaceted problem affecting an individual's physical, social, and psychological well-being must occur (Brenner et al., 2019 & Puhl et al., 2018). Researchers have provided evidence that obese adults suffer from increased psychological distress, including depression, anxiety, and social isolation (CDC, 2020). Additionally, obesity significantly increases the risk of developing chronic diseases, like hypertension, stroke, some cancers, cardiovascular disease, and Type 2 diabetes (CDC, 2020).

Besides the physical and phycological effects of obesity on the population, the Milken Institute (2018) reported that annual direct care costs for chronic disease equaled $1.1 trillion or 5.8% of the annual gross domestic product. The total costs for chronic disease, including losses in productivity, were a staggering $3.7 trillion dollars or 19.6% of U.S. gross domestic product (Waters & Graf, 2018). Palmeira et al. (2018) described obesity as one of the most serious global health problems today, and it continues to grow despite many available interventions for weight loss.

Lee et al. (2019) reported that weight stigma continues to be an acceptable form of discrimination in the United States that continues to increase despite focused attention on reducing weight bias. IWS affects every domain of an individual's life, including

friendships, family, and intimate relationships (Chin & Armstrong, 2019; Lee et al., 2019). Brenner et al. (2020) described IWS as a significant factor for developing and maintaining obesity; however, there is little extant research on the impact of self-stigma on obesity (Ciciurkaite & Perry, 2018).

**Significance to Theory**

The concepts of SE and BD are well established in the current literature on self-concept, body image, eating disorders, nutrition, and obesity (Barnett et al., 2020; De Ruiter et al., 2017; Engur & Karagol, 2019; Kondratiuk, 2020; Lee et al., 2019; Opara & Santos, 2019; Puhl et al., 2017; Ruffino et al., 2018). However, no current studies, nursing or otherwise, explore the relationship between SE and BD or how they impact an individual's internalization of weight stigma, specifically obese, Hispanic women. Furthermore, no current research exists on how culture shapes an individual's perceptions of IWS. Therefore, I conducted this study to uncover a potential foundational correlate of IWS and expand nursing knowledge of obesity as a population health problem.

I used SI and the nursing metaparadigm to examine the relationship between SE and BD and their effect on IWS. This alignment expands SI and provides interpretive meaning and a contemporary nursing perspective to address SE, BD, IWS, obesity, and cultural identity related to the person, health, environment, and nursing (McEwen & Wills, 2019).

**Significance to Practice**

Understanding the relationship between SE and BD and their effect on IWS provides new information and knowledge on obesity in a culture-specific population. The

findings of this study provide nurses with evidence to help innovate and design educational programs, interventions, treatment plans, and evidence-based guidelines for IWS and obesity. The upstream effects of obesity on chronic disease as a population problem requires continued investigation, innovative approaches to care, and focused attention on the underlying physical and psychological causes of obesity.

## Significance to Social Change

This study is significant to positive social change through the creation of new nursing knowledge that incorporates cultural competence related to the relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women. This research provides clinicians with actionable knowledge on the effects of SE and BD on IWS for a specific, obese population. The Hispanic population is the fastest-growing ethnic group in the United States, but there is limited research on SE, BD, IWS, and obesity in Hispanic women (Opara & Santos, 2019). The culturally specific evidence provided in the study findings can be used to improve outcomes for the population and impact positive social change by enhancing future research, public policy, interventions, innovation, and care with culturally appropriate, evidence-based strategies to improve future population health planning and reduce the global rate of obesity.

## Summary and Transition

The purpose of this quantitative, correlational study was to explore the relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women. I collected data using an electronic, internet survey through SurveyMonkey to assess the identified population's perceptions, attitudes, and beliefs of

SE, BD, and IWS. No current studies had addressed the relationship between SE and BD and how it affects IWS in obese, Hispanic women.

Participants provided demographic data via the SurveyMonkey survey that included BMI, age, ethnicity, level of education, number of years living with obesity, and current enrollment status in a commercial or medical weight loss program. Additionally, each participant completed the following three validated instruments, the WSSQ, the RSE, and the BSS. I used multiple linear regression to analyze the collected data and determine the relationship between the predictor variables of SE and BD and the dependent variable of IWS.

In Chapter 2, I reviewed and synthesized the seminal works and current, peer-reviewed literature related to the formation, effects, and concepts of SE and BD, IWS, and the cultural identity norms for Hispanic women (see Blumer; 1963; Ciciurkaite & Perry, 2018; De Ruiter et al., 2017; James, 1890; Kondratiuk, 2020; Opara & Santos, 2019; Rosenberg, 1965, 1989; Winter et al., 2019). Additionally, the theoretical framework and nursing metaparadigm will be described to provide context for how social interaction and interpretative meaning are associated with SE, BD, and IWS. In the literature review, I will also substantiate the need to address obesity at a population health level, highlight specific influences on underrepresented communities, and inform positive social change through new nursing knowledge.

The quantitative research design, methodology, and instruments used to investigate the relationship between SE and BD and their effect on IWS in obese, 30–44-year-old, Hispanic women are discussed in Chapter 3. In Chapter 4, I provided

information on the data collection process, including timeframes, recruitment, response rates, the descriptive demographic characteristics of the sample population, and the statistical results of the regression testing. Finally, in Chapter 5, I discussed the findings, limitations of the study, recommendations for future research, and the impact this research has on social change.

# Chapter 2: Literature Review

Obesity is a global problem, considered one of the leading causes for serious health conditions and chronic disease (CDC, 2020). Despite the seriousness of obesity and the numerous available interventions for weight loss, the problem continues to grow (Ciciurkaite & Perry, 2018; Palmeira et al., 2018). In this study, I explored obesity by quantifying the relationship between SE and BD and their effect on IWS in obese, Hispanic women between 30 and 44 years old. Hispanic Americans are 1.2 times more likely to be obese than non-Hispanic Whites, and Hispanic women were 20% more likely to be overweight or obese when compared to non-Hispanic women (Altman et al., 2017; CDC, 2019). In 2019, Hispanic women accounted for 28.91 million U.S. residents, and 6.38 million aged 30–44-years-old were obese (Statista, 2021).

Many psychological, physical, and social problems contribute to the development and sustainability of obesity (Brenner et al., 2019: Grosso et al., 2019; Puhl et al., 2018). Current research showed that obese adults suffer increased psychological distress, including depression, anxiety, withdrawal, and social isolation (CDC, 2020). In addition, obesity has been linked to an increased risk of developing chronic diseases, such as hypertension, stroke, cardiovascular disease, and Type 2 diabetes (CDC, 2020). Obesity is also the largest and costliest single risk factor for chronic disease in the United States, affecting 42.7% of the population (CDC, 2020). Ethnic minority populations are disproportionately affected by obesity and suffer a greater risk of developing chronic disease (Altman et al., 2017; CDC, 2019; McLaughlin et al., 2017; Statista, 2021).

The development and dissemination of new culturally specific knowledge, treatments, and interventions is crucial to creating positive social change and decreasing discriminatory behaviors towards underrepresented populations living in the United States.

In the literature review, I synthesized the seminal works and current, peer-reviewed literature related to the formation, effects, and relationships of SE and BD and their effect on IWS and cultural identity for obesity in 30–44-year-old, Hispanic women (see Blumer; 1963; Ciciurkaite & Perry, 2018; De Ruiter et al., 2017; James, 1890; Kondratiuk, 2020; Opara & Santos, 2019; Rosenberg, 1965, 1989; Winter et al., 2019). In the literature review, I substantiate the need to address obesity at a population health level, highlight specific influences on ethnic communities, and inform social change and new nursing knowledge.

I framed this nursing study using SI and the nursing metaparadigm to align a sociological theory with the art and science of nursing. A conceptual model discussed later in this chapter illustrates how person, health, environment, and nursing offer context for the concepts of SI and the study variables. The conceptual model also provides a structure for nurses to develop, implement, and evaluate patient education, interventions, and advocacy strategies for those suffering from low SE, BD, and IWS due to obesity.

## Literature Search Strategy

I used keywords to perform database searches between June 2019 and 2021. The literature searches focused on the relationship between SE and BD and their effect on IWS in obese, Hispanic women aged 30–44 years old. Early searches included the terms

*stigma* related to *migrant workers* with *tuberculosis* and *stigma* associated with *chronic disease*. In 2020, I used the Boolean method in primary databases to search for *stigma and SE, stigma SE, symbolic interactionism, stigma, chronic disease, symbolic interactionism,* and *chronic disease.*

In 2021, with the help of a research librarian, I focused my searches on nursing literature. I used the Boolean method to search for *overweight or obesity or obese, women or female or woman or females, BD, SE or self-concept or self-worth,* and *internalized stigma*, which resulted in 47 articles. When *youth* and *adolescence* were excluded, the result was 14 peer-reviewed articles ranging in publication dates from 2017 through 2021. Additional searches used a combination of the terms: *obesity or overweight, SE, internalized stigma SE, internalized stigma, BD, internalized stigma, SE,* and *BD* in adults. The databases searched were MEDLINE, CINAHL PsycArticles, psycEXTRA, and PsycINFO, which yielded 254 peer-reviewed articles. However, adding *Hispanic or Latina women* resulted in zero sources.

Since the beginning of my doctoral journey, I have also focused on the topic of stigma. Another strategy used to identify current literature was citation chaining to uncover recent articles related to the subject. Additionally, I have subscribed to Google Scholar for notifications about new articles written by experts in SE, BD, and IWS, including Pearl, Puhl, Link, Quinn, and Himmelstein. The seminal works on stigma, SE, and self-identity included in this study were written by Blumer (1963), Rosenberg (1965, 1979), Goffman (1969), Mead (1934), Stryker (1980), and James (1890). These authors

have been influential in their field of study and provided valuable foundational principles for the basis of symbolic interactionism, psychology, stigma, self-concept, and SE.

## Theoretical Foundation

SI was founded on sociologic principles and seminal works of James (1890), Dewey (1930), Mead (1934), Thomas (1937), Weber (1947), and Goffman (1963). Each of them conceptualized human interactionism over 50 years ago (Stryker, 1980). However, Blumer (1969) was responsible for synthesizing the work of these predecessors and creating a framework to define the assumptions and concepts of SI. For example, Mead wrote that society is socially constructed on the subjective interpretations of what others believe to be true about objects, events, and behavior. Blumer developed the concepts of SI, symbols, objects, actor, and roles based on Mead's work, stating that individuals develop the symbolic meaning of objects through social interactions and labels.

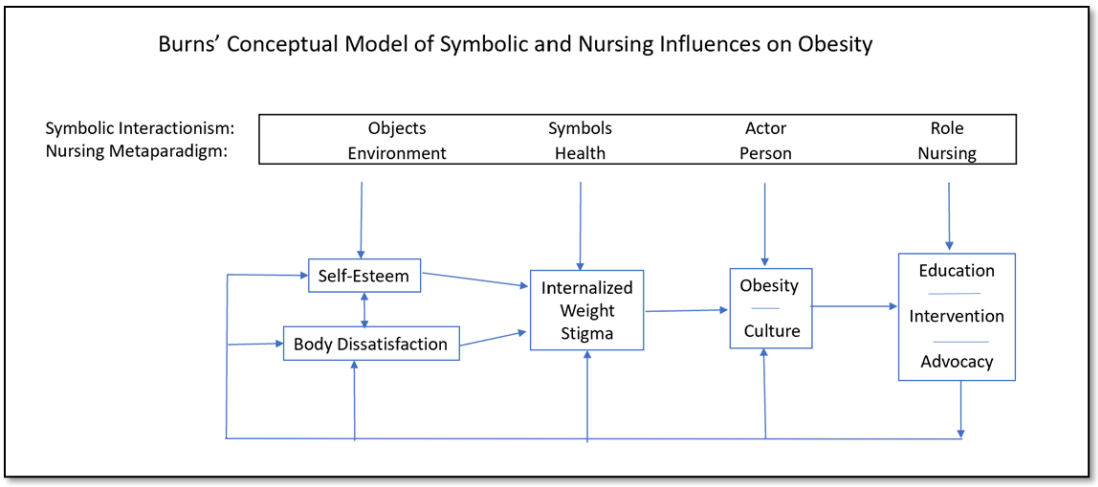
SI is used for the study of interpretive dynamics of individuals or groups and based on three foundational assumptions: (a) people respond to things based on meaning; (b) meaning is derived or arises from social interactions; and (c) people use interpretive processes to acknowledge, understand, and modify the meaning of things over time (Blumer, 1969). Mead (1934) wrote that the self is the perception an individual has of themselves based on interactions with others in society. Goffman (1963) elaborated by stating that society establishes what is ordinary and natural for the members of a group.

SI provided a comprehensive framework for investigating the relationship between SE and BD and their effect on IWS and the impacts on obesity in a culturally

diverse group. The research question was further enhanced by aligning the concepts, relationships, and assumptions of SI with the nursing metaparadigm, as noted in Figure 1. This alignment gives the borrowed sociological theory a contemporary nursing perspective to address SE, BD, IWS, obesity, and cultural identity related to the person, health, environment, and nursing (see McEwen & Wills, 2019).

**Figure 1**

*Burns's Conceptual Model of Symbolic and Nursing Influences on Obesity*




The concepts of SI and the nursing metaparadigm are interactions and interpretations of symbols, objects, roles, and actors. Therefore, SE and BD are objects in the environment created by the shared meaning and social interactions with others (see Blumer, 1969). Symbols are the positive and negative gestures that solicit a shared response from others that can only exist if a person perceives and responds to them (Blumer, 1969). Furthermore, symbols are an individual's positive or negative thoughts and perceptions of their self-worth and IWS. Actors are persons or groups who experience positive or negative thoughts about objects because of the group's

interpretations and labels of weight. In this study, the actor's health may be negatively impacted by the relationship of objects and symbols represented by SE, BD, and IWS in 30–44-year-old, obese, Hispanic women. Actors shape roles in response to the interpretations of symbols and objects (Blumer, 1969). Nurses play a role in providing education, intervention, and advocacy to improve the health of actors.

Research using the SI framework has contributed to new knowledge in sociology, psychology, psychiatry, nursing, and medicine. For example, SI has been used in nursing research to frame research on social inequities, human interaction behaviors, health promotion, and intent to seek care in patients with chronic diseases (McEwen & Wills, 2019). In addition, studies framed by SI have included quantitative and qualitative research on spiritual expression, coping with substance abuse, marriage and relationships, women's health, peer groups, and adolescent SE (Chin & Armstrong, 2019; Grosso et al., 2019; Whittle et al., 2017).

Williams (2018) conducted a qualitative study of 22 purposely sampled obese women and their experiences with health care providers related to their weight. The author used grounded theory informed by SI to identify what was important to them as health care consumers while interacting with health care providers. SI is focused on the participants' reality through social processes, the effect of roles, self-image, and self-identity (Williams, 2018). Structured interview data were analyzed using constant comparative analysis, which is often used in grounded theory (Williams, 2018). Three themes emerged from the data: (a) being defined, (b) feeling judged, and (c) expecting the worst; each theme was related to the participants' perceptions of how health care

professionals treated them because of their weight. First, participants stated they felt invisible to the health care practitioner because their weight was the primary focus of every interaction. Second, the participants described their experiences with health care professionals as being labeled as unhealthy and noncompliant because of their weight. Third, the women reported they learned to anticipate the worst and stated that health care providers framed their weight as the root cause of their health issues (Williams, 2018). Thus, the study participants provided valuable insight into weight stigma, discrimination of obese patients, and avoidance of seeking health care due to obesity.

In a nursing case study, Ayumi and Mitsunobu (2018) described a schizophrenic patient's response to a therapeutic intervention framed in SI. They investigated the development of a therapeutic recreation program as a nursing care model to drive positive outcomes for institutionalized schizophrenic patients. State and local funding sources had increased pressure on long-term psychiatric facilities to decrease the number of institutionalized patients by shifting care into the community (Ayumi & Mitsunobu, 2018). Three themes emerged from the therapeutic recreational intervention: (a) nervousness towards others subsided, and interest in others emerged; (b) recognition of one's owns strengths, shortcomings, and understanding of other's thoughts; and (c) breaking out the one's cocoon and regaining interest in others. Ayumi and Mitsunobu noted that many long-term institutionalized schizophrenic patients often self-isolate and find it difficult to interact with other patients. A therapeutic effect of the recreational program demonstrated a positive effect on the institutionalized patient after the first month of the intervention. The nursing staff observed that the previously nonverbal, self-

isolating patient began speaking during the recreational program. After the second month, the patient interacted with others, asked questions, and recognized his likes and desires. Three months after initiating the therapeutic recreational program, the patient was engaged in meaningful conversations with others. The positive outcomes described in this study supported moving long-term institutionalized schizophrenic patients into community programs when accompanied with a recreational, therapeutic program to improve social interactions with others (Ayumi & Mitsunobu, 2018

In an exploratory, descriptive qualitative study that assessed the feelings and perceptions of nurses who rotated to different jobs within a hospital, Pinhatti et al. (2017) used SI as a framework to understand the social dynamics, interactions, and the personal meaning of the experiences with job rotation for these nurses. Pinhatti et al. stated that nurses are at high risk for burnout due to the emotional stress of caring for sick patients, and emotional stress can increase conflict with peers in other departments. Conflict is often enhanced by a lack of understanding of nurses' performance in other departments, poor leader communication, and weak organizational structure. The authors explained that some institutions had used job rotation as a tool to increase knowledge, improve social skills, and build relationships with others across the workplace. To better understand the effectiveness of job rotation as a tool for conflict resolution, the researchers collected data on 76 nurses and nursing assistants about their experiences.

Content analysis revealed four themes from the nurse interviews: (a) feelings experienced from the announcement of the rotation process; (b) embracement of professionals; (c) perceptions about the work process, facilities, and difficulties; and (d)

evaluation of the rotation process (Pinhatti et al., 2017). Nurses and support staff experienced discomfort about the announcement to engage in job rotation, hesitancy about the change, and feelings of loss related to leaving their department relationships, blindsided, and angry about not having any advance notice about the rotation program. However, once the program began, the participants felt they better understood their peers' work within other hospital departments. The participants stated they began to see the hospital as an integrated entity rather than a single department. Most participants agreed that the rotation program improved their social skills and competencies, especially for interdepartmental communication (Pinhatti et al., 2017).

## Literature Review

Obesity is a multifaceted problem linked to an individuals' physical, social, and psychological well-being (Brenner et al., 2019 & Puhl, 2018). Obese adults suffer increased psychological distress, including depression, anxiety, withdrawal, and social isolation. They are at significant risk for developing chronic diseases like hypertension, stroke, cardiovascular disease, and Type 2 diabetes (CDC, 2020). The literature on IWS is positively correlated to the development and sustainability of obesity in the population (Brenner et al., 2020; Ciciurkaite & Perry; Palmeira et al., 2018). Although the current literature supported SE, BD, and IWS as contributing factors for obesity, there is a lack of research on the relationship between SE and BD and its impact on IWS in 30–44-year-old, obese, Hispanic women (Brenner et al., 2020; Puhl et al., 2017; Winter et al., 2019).

### Stigma

Stigma is commonly associated with prejudice, discrimination, inequity, and social injustice in today's societies due to a characteristic, physical or mental condition, race, religion, or other factors deemed outside societal norms (Tyler & Slater, 2018). In addition, stigma is defined by how individuals experience devaluation. A literature review identified several common themes and interpretations of stigma, including anticipated, experienced, intersectional, internalized, and IWS. Goffman's (1963) seminal work on "The Spoiled Identity" provided scholars with a sociological foundation for describing stigma. Goffman wrote stigmatized individuals are those who "possess a deeply discrediting characteristic that reduces someone from a whole and usual person to a tainted discounted one" (p. 3). Stigma is created by making assumptions about

individuals who are different and acting on stereotypes and prejudices (Goffman, 1963). Current literature described stigmatized individuals as those who are devalued due to an undesirable characteristic, illness, or physical appearance, through a process of stereotyping, labeling, or discrimination (Ciciurkaite & Perry, 2018; Grosso et al., 2019; Tyler & Slater, 2018; Whittle et al., 2017).

Tyler and Slater (2018) wrote, "it is difficult to overstate the influence of Goffman's stigma concept, both on scholarly research and on the wider public understanding of what stigma is" (p. 728). However, many scholars argued that Goffman's conceptualization of stigma does not go far enough to address the contemporary cultural and political issues in today's society. Tyler and Slater posit that stigma is a form of power that will continue to strengthen until society's social and political issues are addressed. Stigma is often framed by theories of human interactionism, including SI, which explore the relationship of self in society, social settings, and specific disease categories. However, it does not go beyond identity management. Tyler and Slater argued that SI theory does not address how people suffer because of stigma, an individuals' ability to direct their fate, or why some individuals are stigmatized over others. The authors noted that the micro-social attitudes of Goffman's stigma concept could be extended by including contemporary issues, such as racism, equity, and social injustice, into today's research on stigma.

**Anticipated Stigma**

Chin and Armstrong (2019) described anticipated stigma, in health care utilization, as an awareness of being discriminated against or devalued without words or action. The researchers conducted a descriptive correlational study that explored the impact of anticipated stigma on health-seeking behaviors in 77 patients with chronic obstructive pulmonary disease ($n$ = 38) and neurologic disease ($n$ = 39). The literature on health care utilization confirmed stigma is a factor for avoiding, delaying, or utilizing health care services, thereby decreasing disease management and quality of life in patients with chronic disease (Chin & Armstrong, 2019; Grosso et al., 2019; Whittle et al., 2017).

The study participants completed the Chronic Illness Anticipated Stigma Scale, a validated 12-item scale with subscales, to measure the level of anticipated stigma felt by family, friends, coworkers, and health care workers. The Health Care Access Measure is a validated 6-item scale to measure health care utilization behaviors; specifically, should the patient access health care services earlier? Finally, the Mental Health Index, a validated 36-item survey, assesses depression levels in the participants (Chin & Armstrong, 2019).

The mean scores for anticipated stigma variables and health care access showed greater anticipated stigma from coworkers than from friends, family, or health care workers and a moderate decrease in health care utilization. Bivariate correlation analysis indicated that anticipated stigma from friends, family, and coworkers was significantly correlated to decreased health care utilization behaviors. Hierarchical regression analysis,

in two models, showed gender, age, marital status, and anticipated stigma had variances of 18% for friends and family, 15% for coworkers, and 15.9% for health care providers, which was consistent with other studies (Chin & Armstrong, 2019; Grosso et al., 2019; Lee et al., 2019).

**Experienced Stigma**

Experienced or enacted stigma is characterized as overt actions by others towards an individual or group that include derogatory language, demeaning gestures, and public humiliation for those who do not meet societal norms (Blumer, 1963; Grosso et al., 2019; Rosenberg, 1979). Whittle et al. (2017) described a qualitative study of 64 participants, which focused on the changes to the welfare system. Welfare to work, enacted in 1992, systematically shifted the disabled poor from state-funded welfare programs to the federally funded Supplemental Security Income or the Social Security Disability Insurance programs. The authors described this shift as a "medicalization of poverty" (p. 182) and prompted a substantial rise in claims for chronic disease. Social Security Insurance and Social Security Disability Insurance became one of the few ways left for non-working disabled adults to obtain cash. However, many unqualified individuals' found ways to take advantage of these programs and led the programs to become the target of enacted stigma (Whittle et al., 2017).

The researchers examined how a shift in government programs shaped the lived experiences of disability and stigma for those who suffered from chronic disease. Two major themes emerged from the participant interviews (a) challenging interactions with social institutions and (b) experiences with stigma. Several subthemes were also

identified within the challenging interactions category, including what types of assistance were available, the differences between programs, and the eligibility criteria for assistance programs. The participants also identified that inconsistent and vague descriptions of benefits further complicated the complexity of the programs. The participants also reported they were eligible for benefits yet waited months for their case to be certified and were left destitute while waiting. Participants described the Social Security Administration as an obstructive bureaucratic agency that was incompetent, uncompassionate, and penalizing at times.

Participants described how living with a disability can potentiate different forms of stigma (Whittle et al., 2017). They commented that they were labeled lazy for accepting assistance and stigmatized for their disability. The participants stated that their interactions with the Social Security Administration contributed to mental distress and the stigma of being poor. Whittle et al. (2017) confirmed that these findings were congruent with other studies and noted that the intersection of chronic disease with race, sexual orientation, and poverty contributed to an individual's perception of being stigmatized.

**Internalized Stigma**

Internalized stigma originates from an individual's belief of self-devaluation, possessing traits of a known stigmatized group, and low SE (Blumer, 1969; Kim, 2020; Lim et al., 2019; Puhl et al., 2018; Rosenberg, 1965). Internalized stigma is linked to poorer psychological and health outcomes and decreased interactions with health care providers (Chin & Armstrong, 2019; Whittle et al., 2017). Multiple studies on

psychological disorders, HIV, eating disorders, and obesity have reported that internalized stigma supported feelings of isolation, low SE, BD, decreased socialization, feelings of shame for being unusual, prejudice, discrimination, labeling, and stereotyping (Essayli et al. 2017; Grosso et al., 2019; Ibrahim et al., 2019; Kim, 2020; Meadows & Higgs, 2020; Puhl et al., 2017; Whittle et al., 2017). A review of the current literature on internalized stigma substantiated many of these claims, particularly in the literature related to seeking help or therapy for those with mental illness.

Patients with psychiatric disorders who fear disclosure of their mental illness have greater internalized stigma than medical patients. Lim et al. (2019) described a study where psychiatric ($n$ = 99) and medical patients ($n$ = 103) were randomly selected to participate in a study on the fear of mental illness disclosure. The researchers hypothesized that psychiatric patients internalized stigma when they feared their mental illness would be disclosed to others and psychiatric patients exhibit lower SE than medical patients.

All participants ($n$ = 2,020) completed the RSE, a validated 10-item tool to measure negative and positive self-worth. The Internalized Stigma of Mental Health-10 is a modified version of the Internalized Stigma of Mental Health-29, which measures internalized stigma. The researchers reported that fear of disclosing psychiatric illness was a strong predictor of low SE for socializing with friends, job seeking, applying for education, and close personal relationships. Linear regression analysis demonstrated that age, higher education, married, and strong faith had higher SE than participants who do

not fear disclosure. The findings demonstrated that positive SE was correlated with improved health outcomes and was consistent with other studies. (Lim et al., 2019).

Ibrahim et al. (2019) investigated health-seeking behaviors for two groups of students in Malaysia. The researchers noted that seeking help for mental disorders was the first step in treatment. However, many barriers to health-seeking behaviors include low socioeconomic status, access to care, transportation, recognition of the need for treatment, treatment effectiveness, mental illness stigma, and cultural factors (Ibrahim et al., 2019). Therefore, the researchers addressed the gap in stigma related to health literacy and intention to seek mental illness care for individuals with low socioeconomic status.

The study participants were a secondary school group of adolescents 13-17 years old (N = 127) and young adults in college 18-25 years old ($N$ = 75); all participants had a previously diagnosed mental disorder. The measures used in this correlational design were the Depression Literacy Scale; a validated 22-item scale to assess mental health literacy, the General Help-Seeking Questionnaire, a validated 10 item (repeated twice) to assess emotional problems, and the Mental Health Seeking Attitude Scale, a validated 9-item scale used to assess attitudes towards health care professionals. Additional measures included the Self-Stigma of Seeking Help Scale, a validated 10-item scale to address self-stigma on those diagnosed with mental illness, and the Beliefs Toward Mental Illness Scale, a validated 21-question tool used to assess beliefs toward mental illness.

Pearson's correlation was used to test the correlations between help-seeking, self-stigma, negative attitudes toward mental illness, and depression literacy towards mental illness and depression literacy. Multivariate linear regression analysis was used to test the

multiple independent variables, including the self-help-seeking domain, self-stigma, negative beliefs, and depression literacy, on the dependent variable, mental health-seeking attitude. The results showed significant differences between the academic groups on depression literacy, self-stigma, and the seeking-help domain. There were no significant differences in help-seeking behavior between groups. Multiple regression analysis demonstrated that only self-stigma seeking help predicted mental health-seeking attitudes regardless of academic group (Ibrahim et al., 2019). Furthermore, self-stigma was the strongest predictor for mental health-seeking attitudes in the study population. However, the researchers noted this could have been influenced by the modified labeling theory, which describes labels' negative effect on an individual. The authors concluded that younger students with negative mental self-help attitudes and low socioeconomic status had higher self-stigma (Ibrahim et al., 2019).

A quantitative study by Brenner et al. (2019) outlined the development of a conceptual framework to increase help-seeking behaviors in college students who were stigmatized by a mental health diagnosis. The researchers stated that public stigma inhibited help-seeking behaviors through self-stigma, and they hypothesized that experiential avoidance is a moderated mediator for internalized stigma. They also theorized that students with mental health disorders suffered from public stigma internalized that stigma and would avoid seeking care or therapy for their illness.

Interventions to reduce self-stigma have shown mixed results in the literature. Self-affirmation and web-based video interventions have shown positive results in decreasing self-help and self-stigma compared to control groups. However, computer

programs aimed at addressing maladaptive behaviors do not reduce self-stigma in help-seeking behaviors. Some interventions increased help-seeking behavior temporarily but had no significant effect on the participants' level of self-stigma long term (Brenner et al., 2019; Puhl et al., 2017).

Experiential avoidance is a protective coping mechanism where unpleasant thoughts and emotional pain are avoided, but avoidance also prevents individuals from improving mental health and well-being. Brenner et al. (2019) described acceptance and commitment therapy as an intervention to promote greater help-seeking behavior for those experiencing self-stigma. Participants with high self-stigma may not seek help due to decreased self-worth. However, less avoidant and self-stigmatized students will seek help regardless of unpleasant thoughts (Brenner et al., 2019).

The moderated mediation of public stigma showed that public stigma was significantly linked to higher self-stigma and lower intention to seek help, consistent with the bias bootstrapped intervals. However, results did not show a significant relationship between public stigma and help-seeking intentions, but experiential avoidance significantly moderated the indirect effect. Participants with high avoidance had a medium indirect relationship with public stigma and intention to seek help through self-stigma. The moderation of self-stigma showed a small interaction effect between self-stigma and experiential avoidance in predicting intention to seek help. The association between self-stigma and intentions was not significant and weaker for those with low experiential avoidance than those with high experiential avoidance (Brenner et al., 2019).

The proposed model provided evidence that experiential avoidance is an intervention to reduce stigma for individuals with mental health. The findings of this study may also help reduce self-stigma and increase the intention to seek help for other psychological and physical conditions; further research is needed in this area (Brenner et al., 2019).

Lee et al. (2019) noted that weight stigma continues to be an acceptable form of discrimination and is growing despite focused attention on reducing weight bias. The researchers agreed that IWS contributes to poor health outcomes, low SE, and greater BD (Brenner et al., 2019; Lee et al., 2019; Puhl et al., 2018). IWS affects every domain of an individual's life, including friendships, family, and intimate relationships (Chin & Armstrong, 2019; Lee et al., 2019). However, there is little research on the impact of self-stigma on obesity (Ciciurkaite & Perry, 2018). This study explored the development of a model identifying the risk factors for IWS using the tripartite model as a starting point. This model suggested that peers, family, and media influence IWS through appearance comparisons and internalization of the thin ideal, postulating that negative feedback impacted the level of IWS (Ciciurkaite & Perry, 2018; Lee et al., 2019; Winter et al., 2019).

Data was collected from 650 university students. Demographic information and scores from the following validated instruments were used for analysis: the Physical Appearance Comparison Scale, a five-question scale measuring the frequencies of social comparisons in social settings, the Binge Eating Scale, a 16-item measure assessing behavior, cognitive, and cognitive aspects of binge eating; the Depression Anxiety Stress

Scales is a 21-item scale to measure negative emotion, and the Impact of Weight on Quality of Life-Lite, 31-items comprising five scales related to the quality of life.

Two models emerged and were tested for fit, one a three-level model and a four-level model. The four-level model proved to be nonsignificant and was dropped. The three-level model resulted in an excellent fit for the data. The following paths were removed: sociocultural pressures to appearance comparisons, stigma experience to appearance comparison norms, appearance comparisons to binge-eating, quality of life, and SE; stigma experience to SE, shame to distress, quality of life, and appearance norms to distress, binge eating, and SE (Lee et al., 2019). The results indicated several mediating and moderating variables that can be used to inform future models, studies, and interventions related to the risks of IWS.

Additionally, the findings suggested that stigma experiences directly affect weight outcomes. Lee et al. (2019) stated that the proposed model showed that sociological pressures and stigma experiences were significant but sociological pressures were stronger. According to the researchers, BD and IWS were the highest risk factors for influencing negative outcomes of obesity. However, these findings may be limited to the study population because of the number of participants with normal or underweight BMI (Lee et al., 2019).

**Weight Stigma**

Weight stigma is a socially constructed concept based on others' interpretative meaning of unacceptable weight (Blumer, 1969). It begins early in childhood development, where children learn to associate obesity with laziness, sloppiness, and

inferiority (Ciciurkaite & Perry, 2018; Rosenberg, 1979; Whittle et al., 2017; Winter et al., 2017). Girls as young as 3 or 4-years old have already developed weight stigma; they often play the role of both the "victim and the perpetrator," as they internalize weight stigma and actively discriminate against their overweight peers (Ciciurkaite & Perry, 2018, p. 23). Obese individuals are often labeled as lazy, lacking control, moral failures, or someone with no self-restraint, and they face daily discrimination for their in-plain-sight attribute. Despite the growing number of individuals with obesity, weight stigma has not diminished over time (Ciciurkaite & Perry, 2018; Palmeira et al., 2017; Puhl et al., 2017). Weight stigma affects families, friends, coworkers, and intimate relationships (Chin & Armstrong, 2019; Ciciurkaite & Perry, 2018; Lee et al., 2019; Puhl et al., 2017; Whittle et al., 2017). There is growing evidence to suggest that weight stigma rivals race discrimination in this country and often favors women over men (Ciciurkaite & Perry, 2018; Puhl et al., 2017).

**IWS**

Individuals with IWS devalue themselves because of weight. Those with multiple failed attempts at weight loss are at greater risk of internalized stigma, decreased physical activity, and a higher risk of developing chronic disease (Ciciurkaite & Perry, 2017). Additionally, they suffer from greater psychological effects related to obesity, including disordered eating, body image disturbance, and self-identity crisis (Ciciurkaite & Perry, 2018).

Puhl et al. (2018) conducted a quantitative study that measured the prevalence, severity, and sociodemographic factors associated with weight bias internalization (WBI)

in three similar sample populations. The total sample consisted of 3534 participants. Sample 1 ($n$ = 456) was recruited from a coalition on obesity, Sample 2 ($n$ = 519) was recruited from Mechanical Turk, a national online participant pool, and Sample 3 ($n$ = 2529) was recruited from a national online research company. The participant's self-reported data points included demographic information, including age, race, education, income, and marital status. In addition, the participants provided information on their weight status, BMI, dieting behavior, history of experienced stigma. Additionally, IWS was measured using a modified version of the Weight Bias Internalization Scale. This validated instrument assessed the level of self-blame for stigma, assigned stereotypes to themselves, and negative attitudes about their body weight (Puhl et al., 2018).

One-way ANOVA compared participant characteristics and weight variables for levels of IWS across samples. Linear regression analysis was used to assess the relationship between the predictor variables, age, gender, race, income level, education, BMI, highest ever BMI, experienced stigma, subjective weight status, and WBI. Results showed that, on average, 52% of participants across all groups endorsed a strong association with internalized stigma. Age, BMI, highest ever BMI, experienced weight stigma, and WBI were significantly higher for Sample 1 than Samples 2 and 3. Participants in Sample 1 were more likely than Sample 2 or 3 to actively try losing weight and dieted over the past year, reinforcing that Sample 1 had a higher risk for WBI (Puhl et al., 2018). Linear regression analysis was used to predict WBI by sample, demographics, BMI, and dieting behaviors. Sample 3 was used as a reference group for Samples 1 and 2, men as a reference group for women, and white as the reference for

race. Higher scores on the WBIS-M predicted higher levels of WBI for White adults, with lower levels of education, high BMI, high perceived body weight, actively trying to lose weight, and history with experienced stigma (Puhl et al., 2018).

The significance of this study is the ability to target interventions, education, and advocacy for obese individuals across a diverse pool of participants who internalize stigma because of their weight. In addition, the results of this study provide information to target those most likely to have high levels of IWS.

## Self-Esteem and Body Dissatisfaction

James (1890), a pragmatist, is credited with being the “Father of American Psychology” (Kahn, 2021, para. 1). His work provided an understanding of the foundational principles used to comprehend self-consciousness, self-concept, and SE formation. Kondratiuk (2020) wrote that SE begins early in life by recognizing the self-consciousness and the subsequent development of an individual’s self-concept. Self-concept is regulated by the process of self-consistency, meaning individuals behave in harmony with the mental picture of themselves, which must be congruent with the interpretation of self to others—inconsistency in self-concept results in low or decreased SE (Kondratiuk, 2020).

Rosenberg (1979) described four components necessary for the maintenance of self-consistency and SE as "protection of self" (p. 57), including reflected appraisal, social comparisons, self-attribution, and psychological centrality. Each component provides insight into the development and sustainability of one’s SE and body satisfaction. Reflected appraisal was described as the influence of attitudes by others,

their view of us as a person, and ultimately how an individual comes to view themselves. Therefore, an individual's low SE and body satisfaction can become internalized and a reflective view of self. Fundamental to self-concept are social comparisons, where individuals learn about themselves by comparing themselves to others. Two social comparisons exist: superior to inferior, translated as smarter or dumber, weaker or stronger, and richer or poorer. The second comparison is deviance to conformity, where deviance is determined by the group or larger society norms (Rosenberg, 1979). For example, obesity in the United States is considered deviance from norms; not subscribing to prevalent beauty ideals are deviant from the norm and may play a significant role in low SE, BD, and IWS (Ciciurkaite & Perry, 2018; Lee et al., Rosenberg, 1979; Winter et al., 2019). The self-attribution component was described as the repeated internal, often negative descriptive statements individuals make about themselves (Rosenberg, 1979). This principle is often referred to as the negative self-talk that humans engage in unconsciously. Finally, the element of psychological centrality was described as the belief that self-concept is not a collection of parts but a complex organizational process that includes intelligence, morality, honesty, and courage essential for self-identity.

**SE**

Consistent with Rosenberg (1979), SE and BD begin early in life by recognizing the self-conscious person (Kondratiuk, 2020). However, self-consciousness is challenging to explain, complicated by many levels of brain function, and elusive to many, including social scientists, whose definition is often dependent on their field of study. More than a century after James (1890) introduced self-consciousness, there is still

little agreement among the social sciences on its definition (Kondratiuk, 2020). Instead of consensus, each discipline perceives self-consciousness from its unique worldview. Behaviorists believe self-consciousness is realized through behavior; psychoanalysts see it as the formation of self through a Freudian lens. An interactionist view is based on communication and shared meaning.

Kondratiuk (2020) wrote about the integration and conceptualization of self-consciousness as a multilayered, integrated process that includes personality, self-awareness, and SE. Self-consciousness incrementally develops from birth as one learns to recognize himself as separate from others through experiences, environment, learning, and interpreting emotion (Kondratiuk, 2020). James (1890) wrote that self-consciousness was a set of psychological processes that receive experiences, perceive the self, and establish a personality. Self-consciousness begins at birth, matures through early childhood, and is responsible for forming SE by around age seven (Kondratiuk, 2020; Lee et al., 2019; Rosenberg, 1979). Children's experiences early in life, either positive or negative, play a significant role in developing identity, SE, and other's perceptions of them (James, 1890).

De Ruiter et al. (2017) proposed the self-organizing self-esteem model (SOSE); like Rosenberg's (1979) principle of psychological centrality, the authors posit that self-concept is not a collection of parts but a complex organizational process. The authors proposed a model for SE development using a lens of intrinsic dynamics or internal patterns of change. De Ruiter et al. agreed with other scholars that SE fluctuates during one's lifetime but remains consistent with one's self-concept. The SOSE model is a

conceptual framework for describing the development of SE across three levels. The micro, meso, and macro levels are not a step-by-step process but rather a continuous progression of self-organization. The microlevel was characterized by moment-to-moment thoughts, feelings, or actions relevant to the self. The mezzo level was responsible for the momentary realization of the self. The macro-level was the core of SE or the steady baseline of one's SE (De Ruiter et al., 2017).

Traditional models of SE have taken a linear top-down approach to conceptualize the development of SE. The authors of the SOSE model used this foundational knowledge but applied it through a lens of a dynamic systems approach, which is a continuous bi-directional process. The authors posit there are "attractor states" responsible for the development of SE that resemble a landscape of peaks and valleys (De Ruiter et al., 2017 p. 61). The peaks and valleys develop through an individual's experiences, habits, and perceptions of positive or negative SE. Furthermore, the peaks and valleys are wide or narrow depending on one's previous experiences and whether they resulted in feelings of positive or negative SE (De Ruiter et al., 2017). Thus, De Ruiter et al. (2017) provided the SOSE model as an alternative platform for further development and understanding of the differences in SE across individuals (De Ruiter et al., 2017).

Engur and Karagol (2019) conducted a quantitative study to measure the accuracy of body perception by comparing the differences in SE, body weight perception, body perception, and sociodemographic information of 350 clinic patients. Participants were randomized to either an overweight group ($n$ = 175) or a normal-weight group ($n$ = 175).

Inclusion criteria for the overweight group included a BMI greater than 30, age between 18 - 65; the normal weight group criteria was a BMI between 18.5 - 29.9, age and gender like the overweight group. The results showed obese patients had lower SE, were less pleased with their bodies and perceived themselves as having a lower BMI than their actual measurement compared to the normal-weight group. Conversely, the normal weight group had higher SE levels, were more satisfied with their bodies, and perceived their body mass index more accurately than the overweight group (Engur & Karagol, 2019).

**BD**

BD is the negative subjective evaluation of one's physical body that highly scrutinizes body parts, such as weight, figure, hip, or breast size (Opara & Santos, 2019). Ruffino et al. (2018) stated that BD is a heightened negative perception of oneself, beginning with a distorted body image. Weight is a highly visible stigmatized condition where individuals experience varying levels of external prejudice and discrimination based on society's beliefs and values of being overweight or obese. Opara and Santos (2019) posited that popular media perpetuate the ideal of thinness, and striving towards unattainable standards increases BD, low SE, and dysfunctional eating behaviors.

Barnett et al. (2020) wrote that BD was linked to low SE in individuals across the lifespan and more prevalent in women. Women 18 - 40 years old are more likely to suffer from self-imposed social isolation. The researchers explored BD and its link to loneliness in two different age cohorts of women. The first cohort was young women, defined as undergraduate psychology students ($n$ = 459), and older women, defined as community-

dwelling individuals over 59 years old ($n$ = 353). Additionally, the researchers looked to see if stigma consciousness was a mediating variable on body satisfaction and loneliness.

The results of a two-way MANOVA (age cohort and gender) demonstrated a significant effect for gender. There was no effect between cohorts and gender, but a significant effect was noted for the older cohort on the increased body satisfaction variable compared to the younger cohort. The younger cohort showed an increase in loneliness when compared to the older cohort. Body satisfaction was higher in men, and loneliness was not significant for gender (Barnett et al., 2020). The findings from the bivariate analysis showed a decreased association with body satisfaction and an increase in loneliness for both cohorts. Body satisfaction and loneliness were significantly stronger in the younger cohort. Using gender as the mediator variable indicated that body satisfaction was associated with lower levels of loneliness, decreased stigma consciousness was associated with higher levels of loneliness, and body satisfaction had an indirect effect on loneliness through stigma consciousness. Young adults demonstrated lower body satisfaction and higher levels of loneliness than older women. Barnett et al. (2020) proposed that younger women have greater pressure to conform with the social norms of their community (college) and meet the beauty ideals set for American women. The women in the older cohort had lower body satisfaction mediated by greater stigma consciousness, which may suggest older women are more aware of age-related stereotypes (Barnett et al., 2020).

Essayli et al. (2017) conducted a qualitative study that explored the impact of weight labels on psychological distress in 113 normal and overweight female college

students. Health care professionals often use high BMI to indicate poor health outcomes, but controversy exists in BMI cutoff points for normal weight, overweight, and obesity as a strict diagnostic criterion. Essayli et al. noted that incorrect labeling of an individual's weight might negatively impact their body image.

College-age women were assigned underweight, normal weight, and overweight labels in this double-blind study. The weight labels were manipulated through random assignment to one of the weight categories. Participants were assigned a random label to assess the effect of perceived body image, IWS, health, and intended weight-loss behaviors based on the new label. The researchers hypothesized that women of average weight but who received a label of overweight would suffer greater BD and internalized stigma (Essayli et al., 2017). The participant data were collected using an online questionnaire and an in-person visit for height and weight measurements. When the student completed the in-person assessment, they were randomly assigned to either the accurate or inaccurate group. The accurate group was labeled with the participant's correct, current weight, and the inaccurate participant group was assigned a manipulated or inaccurate label. The variables measured were eating disordered behavior, perceived and ideal body image, IWS, affect, perceived health, intended weight-loss behaviors, and a manipulation check. The data were analyzed using multiple univariate statistics for the two groups (accurate and inaccurate). The manipulated weight labels' results supported the hypothesis that weight labels negatively affect overweight participants' body image, IWS, affect, and perceived health (Essayli et al., 2017).

Overweight women who were informed they were average weight had almost identical mean scores as their peers with normal weight. Participants labeled as overweight reported greater BD than participants classified as average weight, and perceived body image for the overweight (inaccurate) had decreased body image scores. Normal weight participants labeled overweight did not rate themselves any different than normal-weight participants in the control group. IWS was found to be significant in the group labeled overweight. Positive affect was more negative for those labeled as overweight; participants with an overweight label perceived their health status as less than average, and weight loss behaviors were significant for the likelihood of engaging in weight-loss behaviors (Essayli et al., 2017).

Meadows and Higgs (2020) described a prospective longitudinal study examining how IWS perpetuated food addiction. The researchers described food addiction as synonymous with substance abuse and contributing to eating pathology, body dissatisfaction, and IWS. Meadows and Higgs outlined four components needed for individuals to experience IWS, including awareness of negative societal stereotypes for weight, accept the validity of negative judgments, identify with members of a stigmatized group, and experience decreases in self-worth.

The purpose of the study was to assess if IWS predicted the progression of food addiction. The participants ($n$ = 308) were recruited from a university and asked to complete an online survey at two different points in time; the baseline survey was done in January 2013. The follow-up survey was completed in November 2014 (Meadows & Higgs, 2020). The surveys included one question related to food addiction and 12

questions from the WSSQ. The WSSQ measures fear of weight stigma and IWS using two subscales which can be scored separately: Questions 1-6 measure fear of weight stigma, and 7-12 measure IWS (Lillis et al., 2010). The subscales are essential to identifying an individual's feelings and experiences with stigma (Meadows & Higgs, 2020). The results demonstrated that fear of stigma was positively associated with the progression of food addiction at follow-up but not at baseline. IWS had no association with food addiction progression at follow-up but was positively correlated at baseline.

## Cultural Identity

Obese women experiencing poor self-concept, self-blame, and a distorted self-image were at higher risk for developing IWS (Winter et al., 2019; Brenner et al., 2019; Puhl, 2018). Research on the factors associated with IWS was predominantly focused on White adolescent girls or young women and often lacked the cultural context of minority women (Ciciurkaite & Perry, 2018). Winter et al. (2019) explained that young White women are still in the process of developing a new self-identity as they move from adolescence to adulthood, which provided a plausible explanation for lower SE and BD in this age group. The literature lacked depth and understanding of ethnic attitudes, beliefs, and values that influenced SE, BD, and IWS in culturally diverse populations of women in general and Hispanic women in particular. Research on body satisfaction in culturally ethnic diverse populations is needed across the lifespan (Winter et al., 2019).

No specific research exists on the impact of race on SE, BD, IWS, or obesity. However, Ciciurkaite and Perry (2017) stated non-Hispanic Whites had higher levels of depression related to obesity than people of color. Black women had greater positive

views of their body weight than White women due to differing cultural views of femininity and beauty. Aside from cultural views of beauty, Black women may be more vulnerable to IWS because of racial inequities in society. Less is known about weight, SE, BD, or IWS in Hispanic women; the small amount of research on this group was focused on young girls. Ciciurkaite and Perry (2017) described the Latina paradoxical body image or the intersection of body weight paradigms. The United States' cultural values and body image norms compete with the norms and values of a women's home country. For example, American White women subscribe to a culture of thin waif-like beauty. In contrast, Latino/Hispanic women value curvy fuller figures, underscoring divergent cultural norms for body image in the Hispanic population and potentiating a decrease in SE and increased IWS (Ciciurkaite & Perry, 2018).

The need for research on the relationship between SE and BD and their effect on IWS in obese 30-44-year-old Hispanic women is underscored by the growth of the Hispanic population, which is the largest growing minority population in the U.S. (Statista, 2021). In 2020, the Hispanic population was approximately 62.31 million and will grow to 99.8 million by 2050 (Statista, 2021). Hispanic Americans were 1.2 times more likely to be obese than non-Hispanic Whites, and Hispanic women were 20% more likely to be overweight or obese than non-Hispanic women (CDC, 2019). Hispanic women 30-44 years old experienced high rates of obesity; 35.4% of Hispanic women in this age group were obese versus 28.5% of non-Hispanic White women (CDC, 2019). The significance of research needed on obese Hispanic women cannot be overstated.

It is traditionally assumed, correctly or not, that Hispanic women value curvy, full figures, large breasts, and rounded buttocks. However, Winter et al. (2019) noted that weight and body size was a significant concern for this group of women, who often severely restricted eating to maintain their valued body perception. The constant attention to body size and weight increased the likelihood of eating disorders and depression in Hispanic women. Winter et al. investigated how race influenced body image in women. The researchers compared body satisfaction, body size, skin tone, and weight perception across a sample of 497 White, Black, Asian, and Hispanic women 18-56 years old. Data were collected using an online survey using the Body Appreciation Scale. This 10-item scale included specific skin tone satisfaction questions, weight perception, favorite and least favorite body parts, and features. Demographic information was also collected for the participants' race and BMI. The data were analyzed using a series of covariance analyses (ANCOVA) and chi-square analysis for differences in body size, body appreciation, skin tone satisfaction, and weight perception by race and ethnicity. The results indicated that most women have body size and shape issues regardless of race or ethnicity. However, women of color place a high value on body parts over body size and shape. White women most often found eye color to be their favorite attribute, followed by height. Black women identified lip thickness as their favorite body part, followed by height. Lip thickness and hair were essential attributes for both Hispanic and Asian women.

Winter et al. (2019) explained that the research on body satisfaction in Hispanic women was limited and inconsistent; some studies reported high levels of body

satisfaction while others reported low body satisfaction. Several reasons may be responsible for the discrepancies found in studies of Hispanic women and body satisfaction. As noted, the Latina paradoxical body image (Ciciurkaite & Perry, 2018) is the intersection of body weight paradigms between the U. S. beauty ideal and the beauty ideals of a woman's home country's cultural values may result in psychological distress for Hispanic women. Additionally, the level of acculturation of Hispanic women into U. S. culture can be a significant factor for increased BMI, BD, and depression (Altman et al., 2017).

The fashion, beauty, and media industries promote weight stigma worldwide as they portray the ideal woman as White, thin, and fit (Ciciurkaite & Perry, 2018). Women feel a greater need to conform to beauty ideals and often suffer the consequences much more harshly when deviating from societal norms. Women report discrimination in education, housing, and job advancement because of their weight. Fashion and media outlets continue to promote unrealistic ideals about female beauty by shaping female body weight norms. Women outside of the Eurocentric ideal often blame themselves for failing to meet society's expectations, consequently internalizing those feelings of failure and strengthening low SE and BD (Ciciurkaite & Perry, 2018; Selensky & Carels, 2021).

Today's increased role of social media plays a significant role in body satisfaction for young Hispanic women; they are twice as likely as White women to own smartphones. In addition, young Hispanic women view and download contemporary images more than any other race. These videos and downloads portray beauty ideals that may not resemble the viewer's cultural values, influences, or body type (Winter et al.,

2019). Kim (2020) stated that the growing popularity of social media, selfies, and social comparisons increased BD and psychological well-being in young women.

Kim (2020) investigated the mediating role of SE on BD for those engaging in social media use and selfie-posting behaviors. The researcher hypothesized that SE would mediate the relationship between selfie posting and BD. Popularity will moderate the influence of selfie posting on SE. The need for popularity will moderate the indirect influence of selfie posting on BD through SE.

The need for popularity is the desire to appear popular and be accepted by one's peer group. Social media platforms provide an avenue to increase popularity by using selective image presentations. Individuals who are popular offline have high SE and reinforce their popularity with an online presence. Conversely, those with low SE try to garner online popularity to fill the void in their low offline popularity. Those with the need for greater popularity often go to great lengths to gain likes, comments, and shares from social media; they disclose more personal information and more often enhanced personal images through editing and retouching. The need for high popularity often relied on others' evaluation, confirming Mead's (1934) statement, the self is based on the interactions with others in society. Individuals with a low need for popularity generally post selfies as a self-affirming act to enhance their SE. Kim (2020) explored low SE and BD literature, noting that low SE promotes greater body surveillance, comparisons, and shame. Those with low SE who do not have confidence in their physical appearance often devalue themselves.

The need for popularity was measured using twelve questions from an earlier study on peer pressure, popularity, and conforming in adolescence. Questions like "It is important to be popular" and "At times, I have ignored some people in order to be more popular with others" showed high reliability ($a$ = .92, $M$ = 2.93, $SD$ = 1.15; Kim, 2020 p. 5). The control variable, Instagram usage, was assessed by two questions: "How often do you check Instagram" and "How long do you spend on Instagram on a typical day"? The questions were calculated using two different scales, and standardization for comparison was achieved using a *z*-score. An average score was created for Instagram use (range = 1.68 to 3.99; Kim, 2020 p. 5). Additional variables included age, BMI, SE, BD, and selfie posting.

The results indicated that frequent selfie-posting was correlated to higher SE when age, BMI, Instagram use were controlled. SE was significant in mediating selfie posting on decreasing BD when the need for popularity was low. Popularity was used as a moderating variable, controlling for age, BMI, and Instagram uses. The findings were significant and negative on SE exclusively for those with low SE. The moderated mediation showed an indirect effect of selfie posting on BD significantly moderated by SE when the need for popularity was low. Although not generalizable to all women, this study provides evidence that others' evaluation is vital to SE and body satisfaction (Kim, 2020).

Altman et al. (2017) explored how weight evaluation and BD affect Mexican women (Hispanic) as they assimilate into the U.S. social environment. Assimilation into a new culture brings about acculturation stress, for some individuals, marked by

depression, anxiety, low SE, disordered eating, and BD (Altman et al., 2017). The literature on weight in Mexican and Black women showed they are heavier than any other racial group in the U. S. (Altman et al., 2017; Ciciurkaite & Perry, 2019). In addition, they often reject the beauty ideals established by Western culture because of low socioeconomic status (SES) and racialization. Racialization is defined as taking different paths to assimilation, including upward and downward integration into a new culture. Upward assimilation is associated with higher SES, while downward assimilation is associated with low SES, a cycle of poverty, and disenfranchisement (Altman et al., 2017).

The researchers conducted a binational study to explore the migration and acculturation processes for Mexican, White, and Black women (Altman et al., 2017). The authors compared data from Mexico's 2006 Nacional de Salud y Nutricion (National Health and Nutrition Survey). The study looked at the records of 17,102 individuals from the 1999 - 2009 United States National Health and 8,487 records from the Nutrition Examinations Survey for Mexican nationals, immigrants, U.S. born Mexicans, U.S. born non-Hispanic Whites, and U.S. born non-Hispanic blacks (Altman et al., 2017). Weight self-evaluation, the dependent variable, was assessed with a single question where the participants identified as underweight, overweight, or about the right weight; BD was extrapolated from responses of overweight. BMI was assessed using the CDC reference for normal weight as a BMI less than 25, overweight equals a BMI of 25 to 30, obese I is a BMI of 30-35, and obese II, BMI greater than 35. The variables for country of residence and race/ethnicity were categorized into Mexican nationals, Mexican (born in

the U.S. or Mexico), U.S. born White, and U.S. born Black. The four groups were further divided into five subgroups for indicators of U.S. integration. The first subgroup was measured on language spoken (English to Spanish) on a 5-point scale; the second subgroup was Mexican born who spoke Spanish only; the third subgroup was Mexican born who migrated to the US after 20 years old. The fourth subgroup was Mexican-born but migrated to the United States as children, and the last group was U.S. born Mexicans. The final analysis contained a migrant adjusted weight for respondents likely to live in a migrant-sending household (Altman et al., 2017). The descriptive analysis across the five subgroups for residence, race/ethnicity, and nativity showed that U.S. born White women were most likely to be normal weight, followed by Mexicans and U.S. born Black women. In addition, the tendency to evaluate as overweight increased with U.S. exposure and was strongest among the normal weight, Obese I, and Obese II subgroups (Altman et al., 2017).

Five logistic regression models were developed, predicting weight evaluation in the five subgroups for U.S. integration while controlling for BMI, educational level, whether a doctor had ever indicated the participant was overweight, and other variables not identified. The results showed that U.S. born Black and Mexican nationals had the same odds of evaluating themselves as overweight but much lower than U.S. born White respondents. Mexican women with the lowest integration into the U.S. social environment were significantly less likely than U.S. born White women to evaluate themselves as overweight. However, as social integration increased, so did the likelihood of Mexican nationals to evaluate themselves as overweight. Altman et al. (2017) noted

that highly integrated Mexican women are equally comparative to U.S. born White women in their self-evaluation of being overweight.

## Summary and Conclusions

The literature review strengthened the need for quantitative research to address the association between SE and BD and their effect on IWS in 30-to 44-year-old obese Hispanic women. Several themes are noted throughout the literature. First, SE and BD are associated with IWS, but the relationship between the two concepts or their impact on IWS is not quantified. Second, the literature provided insight into the consequences of IWS; namely poor physical and psychological health and the development or sustainability of obesity (Altman et al., 2017, Brenner et al., 2019; Ciciurkaite & Perry, 2018; Engur & Karagol, 2019; Essayli et al.,2017; Lee et al., 2019; Lim, 2020; Meadows & Higgs, 2020; Puhl et al., 2017; Puhl et al., 2018; Winter et al., 2019). Third, the cultural impact of IWS is complicated by the level of acculturation (Altman et al., 2017) and the Latina paradoxical body image (Ciciurkaite & Perry, 2018).

The seminal works of James (1890), Goffman (1963), Blumer (1969), and Rosenberg (1979) illuminated the complex creation of the self, the fragility of SE, the comparisons to others through interpretative meaning, and how deviance to norms creates social and internalized stigma. The current literature confirmed that SE, BD, IWS, and culture all play a part in the growing problem of obesity in the U.S. and worldwide.

SI and the nursing metaparadigm provided a framework to explore SE, BD, IWS, and cultural identity concepts. In addition, the framework offers nurses a foundation to create positive social change at the population health level through education,

intervention, public policy, and advocacy. The next chapter builds upon the research question with a blueprint (design) to measure the relationship between SE and BD and their effect on IWS.

# Chapter 3: Research Method

## Research Design and Rationale

The purpose of this correlational study was to explore the relationship between SE and BD and their effect on IWS in obese, 30–44-year-old Hispanic women. No extant literature addressed the relationship between SE and BD and their effect on IWS. The findings of this study filled the knowledge gap and provided researchers, practitioners, and individuals with definitive factors to combat obesity.

I used G*Power 3.1 analysis to calculate the sample and effect size. The analysis for a medium effect of 0.15, alpha of 0.05, and power of 0.8 yielded a total sample size of 68 participants. Hispanic women who met the inclusion criteria were recruited from the internet through SurveyMonkey and social media (i.e., Facebook) groups. Eligible participants were Hispanic females between 30 and 44 years old, not enrolled in a commercial or medical weight loss program, and had a BMI greater than 30. Individuals were excluded if their BMI was less than 30, were male, non-ethnic Hispanic, younger than 30, or older than 44. Those who met the inclusion requirements and agreed to participate were asked to complete a survey that included demographic information and questions from three validated tools, the BSS, WSSQ, and RSE, to measure their experiences with SE, BD, and IWS.

I posted an invitation to participate in four social media (i.e., Facebook) groups to gain interest in this research study. Additionally, an internet survey was deployed to a pool of participants through SurveyMonkey. Although I intended to post flyers in public areas, the internet survey returned 261 responses in 24 hours, and the social media group

surveys were closed. In the survey introduction, I explained the purpose of the study, design, variables being measured and provided a short description of instruments, an approximate time to complete the survey, and a URL to access the survey. Before a participant began a survey, they were asked to read and accept the consent form. The form contained statements that participation was voluntary, information collected would be kept confidential, participants could withdraw from the study at any time, and encouraging the participants to ask questions. The participants were also informed of the risks and benefits of participating in the study, directed to a resource if they experienced any discomfort due to the study questions, and informed on how to access the study results. Participant agreement was confirmed by accessing the survey URL and answering "yes" to Question 1.

The confidentiality of data was a primary objective of the overall data management plan. I was required to protect the participants' privacy. The identity of participants was kept anonymous, and no identifying information was collected, or could responses be connected to any identifying information. The data collected were stored by SurveyMonkey and are accessible only to me as the account owner through a secure password. Data will be kept for at least 5 years, as required by Walden University.

## Methodology

### Population

The population sample was comprised of obese, Hispanic women recruited from the internet through SurveyMonkey ($N$ = 261). No surveys were returned through social

media groups, word of mouth, or posted flyers. Only responses that met the inclusion criteria (N = 87) were included in the final analysis.

## Sampling and Sampling Procedures

I calculated the participant sample size using G*Power 3.1 power analysis to determine the sample and effect size. A medium effect size of 0.15, alpha of 0.05, and power of 0.8 yielded a total sample size of 68 participants to detect a medium effect. The final sample of ($N$ = 87) was above the required number of participants.

## Procedures for Recruitment, Participation, and Data Collection

### Instrumentation and Operationalization of Constructs

I recruited participants from the internet through SurveyMonkey and social media groups (i.e., Facebook). The demographic data collected for each participant were age, ethnicity, BMI, level of education, age, number of years living with obesity, and current enrollment status in a commercial or medical weight loss program. Additional data points were the sum of scores for the three following instruments. The WSSQ is a validated, 12-question scale using a 5-point Likert scale that measured the level of agreement with the questions (Lillis et al., 2010). The RSE is a validated, self-reported, 10-item scale using the Guttman scale that measured the participant's feelings of self-worth and self-acceptance (Rosenberg, 1965; 1979). The BSS is a validated, 16-item survey using a 7-point Likert scale that measured the participants' satisfaction with different body parts (Slade et al., 1990). The validity and reliability of these instruments were well documented in the literature and will be discussed later in this chapter (see Lillis et al., 2010; Rosenberg, 1965,1979; Slade et al., 1990).

**WSSQ**

Lillis et al.'s (2010) WSSQ is a 12-item scale intended for screening overweight and obese adults and not designed for use on individuals with a normal BMI. In this study, I used the summed scores for the WSSQ to measure IWS, which served as the dependent variable in the regression analysis. Permission to use the instrument was obtained from the author (see Appendix A).

The primary reason for developing the WSSQ was the lack of a tool to measure perceptions and attitudes of those with obesity. Existing tools, such as the Attitudes Towards Obese People Scale and Beliefs About Obese Persons, measured others' perceptions and beliefs about obesity. Additionally, tools like the RES used in previous studies were modified but still lacked the needed sensitivity and specificity to capture variances associated with SE related to weight.

Lillis et al. (2010) explained that the WSSQ tool captured an individual's responses about the concept of weight self-stigma using two subscales: fear of enacted stigma and self-devaluation. Initial development of the WSSQ tool began with investigating 300 different attributes thought to be reflective of stigma. After the initial evaluation, 30 attributes were retained for further analysis of the WSSQ. The 30-item scale was tested on ten overweight participants enrolled in a weight loss program, which resulted in another eight attributes being dropped due to redundancy.

Data from the two sample groups were combined ($N$ = 169), and participants completed the following measurements:

- BMI;

- General Health Questionnaire is a 12-item scale to assess psychological distress;
- Brief Symptom Inventory (BSI) is a 53-item scale assessing nine symptom dimensions;
- Obesity Related Well Being Questionnaire (ORWELL-97), an 18-items scale measuring the obesity-related quality of life;
- Beliefs and Attitudes toward Obesity Scale (BAOP) is an eight-item scale assessing beliefs about what causes obesity,
- The Three-Factor Eating Questionnaire (TFEQ) s a 51-item tool with three subscales measuring restraint, disinhibition, and hunger;
- Acceptance and Action Questionnaire (AAQ) is a nine-item scale measuring experiential avoidance, cognitive fusion, and actions related to emotions; and
- Acceptance and Action Questionnaire for Weight Related Difficulties (AAQW) is a 22-item scale assessing acceptance of weight-related thoughts and feelings.

The remaining 22-items underwent an exploratory components analysis with varimax rotation, which revealed a two-and three-factor solution with an observed variance of 56.33%. The three-factor solution had little cross-loading and items clustered around the theoretical dimensions. Factor 1 had items for fear of enacted stigma and discrimination due to weight, Factor 2 items related to self-devaluation and shame due to weight, and Factor 3 had general items related to shame (Lillis et al., 2010).

An additional six items were removed from the scale based on redundancies found in the fear of enacted stigma factor. Data from the Sample 2 (i.e., intervention) group was reviewed for items sensitive to stigma reduction strategies. Within-group t tests were used to analyze the changes from baseline to follow-up, and ANOVAs were used to analyze the between-group changes from baseline to follow-up. An oblique rotation was done on the 12 remaining items, and Factor 3 was dropped; the data fit a two-factor solution with six items loading on fear of enacted stigma and six factors loading on weight self-stigma. The final 12-item WSSQ had a Cronbach's alpha of 0.878, the subscale for fear of enacted stigma had an alpha of 0.869, and the weight self-stigma subscale had an alpha of 0.812. The subscales were correlated with the total scale, enacted ($r$ = 0.882), self-stigma ($r$ = 0.865), and total scale ($r$ = 0.527). Test-retest reliability was done using the control group from Sample 2 ($n$ = 44), which reported the total score ($r$ = 0.787), subscale enacted ($r$ = 0.804), and self-stigma ($r$ =0.618).

Construct validity for the WSSQ was assessed using bivariate correlations between the 12-item WSSQ for the theoretical interest and demographic information (Lillis et al., 2010). When possible, the groups were combined using Sample 2 baseline scores for age, gender, income, BMI, and AAQW. Sample 2 only baseline scores were correlated with the AAQ, GHO, and ORWELL. Sample 1 was correlated with BSI, TFEQ, ATOP, and BAOP.

The results showed that the WSSQ was highly correlated with obesity-related quality of life and experiential avoidance items in the AAQW. A moderate correlation was found with BMI, gender, AAQ, and psychological distress measured in the BSI and

GHQ, disinhibition from Factor 2 of TFEQ. No correlations were found for income, age, eating, restraint, and hunger. The subscales showed a significant correlation between the ORWELL ($Z$ = -2.14) and the BSI ($Z$ = -2.35). Sensitivity to change was measured using the 3-month follow-up scores of the Sample 2 group and the baseline score as a covariate. Sample 2 group scores showed a reduction of general weight-related stigma, significantly lower self-stigma, and enacted stigma, and a moderate to large effect for higher quality of life, less psychological distress, and lower BMI because of the intervention (Lillis et al., 2010).

**RSE**

Rosenberg (1979) described the RSE as a measure of positive and negative SE. I obtained permission to use the tool from the author (see Appendix B). The RSE is a 10-item Guttman scale with a reproducibility of 92% and a scalability coefficient of 72%. The Guttman scale uses "contrived items" for scoring (Rosenberg, 1979 p. 292). Item I is a combined score of Questions 3, 7, and 9; the Item II score is derived from Questions 4 and 5; and Items III, IV, and V are scored either positive or negative based on the answers for Questions 1, 8, and 10. Item VI is the combination of answers to Questions 2 and 6 (Rosenberg, 1979).

Construct validity was measured for theoretical alignment with SE by testing the relationship of depressive affect, anxiety, and peer-group reputation (Rosenberg, 1979). The depressive effect had a clear relationship between the SE scale and the six-item Guttman scale based on the New York State study ($N$ = 272) measuring self-stability (Rosenberg, 1979). The SE scale showed that participants with high SE scores (4%) and

those with low SE (80%) were rated as highly depressed ($r$ = .3008). Anxiety was highly correlated ($r$ = .4848) for 69% of respondents who self-identified as having low SE, compared to the 19% who reported having high SE. In the New York State study, peer-group reputation was measured in 272 high school students. Those with high SE were most likely to participate in extracurricular activities, be elected to the student council, and become opinion leaders.

Convergent and discriminate validity was examined using Campbell and Fiske's (1959) multitrait-multimethod framework (Rosenberg, 1979). The framework measured SE adequacy against four different measures (i.e., monotrait-heteromethod), including the RSE scale, the Kelly Repertory Test, the Health Self-Image Questionnaire, and ratings by a psychiatrist. Convergent validity measured the same concepts with different methods. Discriminate validity required higher monotrait-heteromethod correlations than heterotrait-monomethod correlations. The RSE demonstrated a correlation to the self-ideal discrepancy method of ($r$ = .67), Self-Image Questionnaire ($r$ = .83), psychiatrist rating ($r$ = .56); however, in the New York State study, RSE showed a correlation of ($r$ = .53), lower than the monotrait-heteromethod correlation. An additional criterion for discriminate validity is whether the monotrait-heteromethod correlations are higher than the heterotrait-monomethod correlation. The correlations between the RSE, self-concept stability, the Self-Image Questionnaire, and the psychiatrist ratings were ($r$ =.40, $r$ = .34, and $r$ = .21), respectively. The RSE demonstrated both convergent and discriminate validity (see Rosenberg, 1979).

Factor analysis in a study of 340 high school students uncovered two factors, positive SE and negative SE (Rosenberg, 1979). Students were assigned scores on each factor, and correlations were done on 16 variables in three domains: parental socioeconomic background, psychological disposition, and social and political attitudes. The 16 variables demonstrated that positive and negative SE were identical in direction, strength, and consistency (Rosenberg, 1979). The RSE scale has been in use since 1965 and remains a consistent and reliable measure of SE.

**BSS**

The original BSS was developed from the Body Cathexis Scale, a 46-item scale to measure body parts and function (Slade et al., 1990). The 16-item BSS measured the satisfaction or dissatisfaction of eight body parts above the neck and eight body parts below the neck using a 7-point Likert scale. Permission to use the tool in the current study was granted by the publisher, Taylor & Francis (see Appendix C). In the current study, BD was an independent variable correlated with SE to assess the impact on the dependent variable of IWS.

Slade et al. (1990) explained that the validation of the tool was conducted on samples of all-female of college students (N = 122), nursing students (*N* = 463), female volunteers (*N* = 100), overweight subjects (*N* = 169), and patients with eating disorders (*N* = 84). Demographic data were collected for height, weight, and age for all groups. ANOVAs demonstrated significant differences between the five groups for all measures. The overweight group was older, shorter, and heavier than the control groups, and the eating disorder groups weighed less than the other groups (see Slade et al., 1990).

Component analysis was done using the college group ($N$ = 122), and two factors were identified (Slade et al., 1990). The first was a general factor, accounting for 37.6% of the variance, where all 16 factors had a positive loading of .40. The second component accounted for 10.6% of the variance and was bipolar; seven items above the head loaded positively and seven below the head loaded negatively. The analysis yielded three scales, (a) the general BD score is derived by summing all 16 scores; (b) head dissatisfaction is the sum of the seven scores for items above the head, including head, face, jaw, eyes, teeth, nose, and mouth; and (c) BD is the sum of scores for the seven parts below the head, including shoulders, chest, tummy, arms, hands, feet, and legs (Slade et al., 1990).

Additional component analysis was done due to the instability of the second factor, using the nursing students and the college student subsets (see Slade et al., 1990). The results demonstrated that the second-factor components emerged as head versus body, with factor variation across the two student samples. Component analysis in the eating disorder group also produced a two-factor solution. Ears and neck were initially excluded from the body scale due to negligible loading in the original sample and low loading across the student samples. A final check on the internal consistency of the three scales was done by calculating Cronbach's alpha in the .80 plus range and confirmed the internal consistency of the three scales (Slade et al., 1990).

ANOVAs between the five samples were found to be highly significant. General BD showed that the eating disorder and overweight groups were significantly different from the other groups. The nursing students had significantly lower body satisfaction than the college students. The findings for head satisfaction were identical to general

body satisfaction. BD showed a significant difference between the eating disorder and overweight groups, and nurses scored lower than the volunteer and college groups.

The BSS was compared to the Body Shape Questionnaire using a sample of 169 overweight subjects before a ten-week intervention. The scores on the Body Shape Questionnaire were positively correlated with the BSS scale; the general subscale was ($r$ = 0.44), the head scale ($r$ = 0.26), and the body had an ($r$ = 0.52) correlation (see Slade et al., 1990). The BSS provided three measures of BD on one scale while maintaining internal consistency.

## Study Variables

The instruments used in this study represent the variables that were studied. SE was an independent variable measured using the RSE, BD was the second independent variable measured using the BSS, and IWS was the dependent variable measured using the WSSQ. Additional descriptive variables included age, BMI, ethnicity, level of education, the number of years living with obesity, and current enrollment status in a commercial or medical weight loss program.

### WSSQ

The WSSQ was designed to capture the multifaceted concept of weight self-stigma using two subscales, fear of enacted stigma and self-devaluation. The WSSQ is a 12-question scale using a 5-point Likert scale to measure the level of agreement with questions like "I'll always go back to being overweight" and "Others are ashamed to be around me because of my weight" (Lillis et al., 2010 p. 974). The data points are summed for the full scale or either of the subscales; Questions 1-6 represent the subscale for

devaluation, and 7-12 represent the fear of enacted stigma subscale. The sum of scores for the total instrument was used as the data point for the dependent variable in my regression analysis (Lillis et al., 2010).

**RSE**

The RSE is a self-reported 10-item, 4-point Likert scale measuring feelings of self-worth and self-acceptance (Rosenberg, 1965;1989). The RSE scale was calculated using the Guttman scale of "contrived items" for scoring (Rosenberg, 1979 p. 292). Item I is the combined score of Questions 3, 7, and 9; item II score is derived from Questions 4 and 5. Items III, IV, and V are scored either positive or negative based on the answers for Questions 1, 8, and 10. Item VI is the combination of answers to Questions 2 and 6 (Rosenberg, 1979). For example, Question 3 states, “I feel I have a number of good qualities,” Number 7, “I feel that I’m a person of worth, at least on an equal plane with others,” and Number 9, “All in all, I am inclined to feel that I am a failure” (Rosenberg, 1979 p.291). The sum of Guttman scores was used as a data point for one of the two independent variables in the regression analysis.

**BSS**

The BSS is a 16-item survey using a 7-point Likert scale where number 1 represents very satisfied, and 7 is very unsatisfied. The scale has three subscales, the general is the sum of the full scale; the head subscale is the sum of scores for body parts of the head such as lips, teeth, nose, and mouth; and the body subscale is the sum of scores for body parts below the head including arms, legs, feet, hands, and shoulders. The questions on the BSS are written to solicit satisfaction with body parts, including "I am

satisfied with…", fill in the body part (see Slade et al., 1990). In my research study, the general total score was used as a data point for the second independent variable, BD.

## Data Analysis Plan

The Statistical Package for Social Sciences (SPSS) version 25.0 from the International Business Machine Corporation (2020) was used to evaluate Cronbach's alpha for all participant data on each of the three scales, normality of participant data for each scale, and the multiple linear regression analysis. The regression analysis predictor variables were participant data from the RSE and BSS. The outcome variable was measured using participant data from the WSSQ.

The research question and hypotheses were: What was the relationship between SE and BD and their effect on IWS in 30-44-year-old, obese, Hispanic women?

$H_o$: There was no relationship between SE and BD and their effect on IWS in 30-44-year-old, obese, Hispanic women.

$H_a$: There was a relationship between SE and BD and their effect on IWS in 30-44-year-old, obese, Hispanic women.

The study was designed to gather data from eligible participants recruited from the internet through SurveyMonkey and Facebook social media groups. Participants completed a 47 question survey to assess the impact of SE, BD, and IWS on their daily struggle with obesity. The survey included descriptive demographic data to inform the reader about the study sample's central tendency, frequency, and distribution (Gray et al., 2017; Warner, 2013).

I used SPSS to complete the multiple linear regression analysis with a confidence level set at 95% and an alpha of 0.05. The data were cleaned to ensure the inclusion criteria were met and outliers or impossible values were removed (Gray et al., 2017). Multiple linear regression analysis required that several assumptions were met, including (a) The dependent variable should be quantitative and be normally distributed, (b) linearity for the predictor variables must be present, (c) the variables were not correlated with each other, and (d) homogeneity of variance must be present (Warner, 2013). The assumptions were tested using SPSS, no violations of assumptions for normality, linearity, or multicollinearity were found.

The regression analysis assessed how well the independent variables predicted the outcome, how much variance was predicted by each independent variable when other variables were controlled, and the strength of the independent variables to predict the outcome (Warner, 2013).

## Threats to Validity

### External Validity

Threats to external validity for this study were related to the level of acculturation into U.S. culture, including age, English fluency, and immigration status (Altman et al., 2017). Highly acculturated Hispanic women are considered those who are proficient in English due to their years living in the U.S. Alarcon et al. (2016) stated that highly acculturated women were more likely to mirror the experiences and health issues of U.S.-born non-Hispanic women. For example, the researchers explained that children who migrated to the U.S. before age 12 have the same risk factors for developing substance

abuse, anxiety, BD, and obesity as their U.S.-born counterparts because of early socialization and assimilation into U.S culture (Alarcon et al., 2016). According to assimilation theory, most immigrants to the U.S. eventually lose their ethnic distinctions over time and with the passing of generations (Altman et al., 2017). Therefore, women fluent in English rate themselves identical to U.S.-born Black women, both of which are much lower than the U.S.-born White women. Mexican women who only speak Spanish are the least integrated into U.S. culture and the least likely to evaluate themselves as overweight or obese (Altman et al., 2017).

The Latina paradoxical body image is the intersection of body weight paradigms of the woman's home and host country's (Ciciurkaite & Perry, 2018). Hispanic women are not a homogenous group. Therefore, the length of time a participant has lived in the U.S., how old they are, and their language proficiency limits the current study.

**Internal Validity**

The study population was sufficiently narrowed by the inclusion and exclusion criteria, which decreased the number of extraneous variables that could impact the study. However, I assumed that the completed surveys reflect the targeted population, female, Hispanic, obese, and between 30-45 years old. There was a risk of not reaching an appropriate number of responses, thereby extending the time for data collection, or seeking other avenues for recruitment into the study. However, the survey participants were narrowed to age and ethnic group by SurveyMonkey, and the number of responses was sufficient to proceed with the analysis. There were no interventions, partnerships, or test-retests in the current study that decreased the effects of history, maturation, selection,

testing, instrument changes, and experimental mortality and improved the study's internal validity (Shadish et al., 2002). Generalizing the relationship between SE and BD and their effect on IWS in obese Hispanic women 30-40-year-olds can only be made to similar homogenous populations (Gray et al., 2017).

**Ethical Procedures**

The ethical challenges of protecting privacy, minimizing harm, and protecting the participants' data required adherence to the procedures for the Institutional Review Board (IRB: Ravitch & Carl, 2016). All research requires ethical design and methods that protect the participant's privacy, confidentiality and minimize harm (Ravitch & Carl. 2016).

Researchers have a moral obligation to adhere to the *Ethical Principles and Guidelines for the Protection of Human Subjects of Research (1979)* report, known as the Belmont report. The report outlined three foundational principles to guide ethical research: respect of person, beneficence, and justice. Individuals participating in research are afforded certain protections, a) persons should be treated as autonomous; those with diminished autonomy must be protected; b) do not harm, maximize possible benefits, and minimize possible harm; and c) the selection of research subjects must be scrutinized to maintain equal representation and not advantage or disadvantage certain groups of individuals (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). Methodical attention to process and documentation of study design, informed consent, expectations, goals, and outcomes, along with obtaining IRB approval, reduce ethical challenges (Houser, 2018).

The goals of the IRB are to protect the research participants from harm, protect the confidentiality, and ensure the consent process is informed (Ravitch & Carl, 2016). The researcher is responsible for ensuring the study language does not imply pressure or coercion; does not mislead the participants about how the data will be used. The participants have the right to ask questions or decline participation. The researcher is responsible for ensuring all efforts are made to protect the confidentiality or anonymity of data. The data are not used to portray inaccurate, judgmental, or misleading information about the participants (Ravitch & Carl, 2016).

I submitted my study design to the IRB for review and approval. After recommended revisions and secondary review, the IRB approved my study. IRB Approval Number 08-11-21-1012005 expires 08-10-22. I launched my survey using the internet and social media groups to collect demographic information and the participant's feelings, beliefs, and perceptions of SE, BD, and IWS.

The confidentiality of data is a primary objective of the overall data management plan. I am required to protect the participant's privacy and keep the identity of respondents anonymous. No identifying information was collected during the survey, nor can any data be connected to an identity. The participant's data were stored by SurveyMonkey and are accessible only to me as the account owner through a secure password. Data will be kept for at least 5 years, as required by Walden University.

## Summary

In conclusion, Chapter 3 reviewed the study design and methodology to support the inquiry into the relationship between SE and BD and their effect on IWS in 30-to 44-

year-old obese Hispanic women. I used a correlational design with multiple linear regression for data analysis.

I invited obese Hispanic women between 30 and 44 years old to participate in my study using a secure URL posted to social media (i.e., Facebook) groups and the internet. The internet survey was deployed to a pool of participants through SurveyMonkey. The invitation included a short explanation of the study, including the design, variables, a description of the instruments, an approximate time to complete the survey, and an URL to access the survey.

I calculated the sample size using G*Power 3.1 power analysis to determine the sample and effect size (see Softpedia, 2020). A medium effect size of 0.15, an alpha of 0.05, and a power of 0.8 yielded a total sample size of 68 participants to detect a medium effect (Softpedia, 2020). Due to the potential for incomplete data, I increased the sample size by 10% to 75 participants who met the eligibility criteria. The internet survey deployed by SurveyMonkey returned 87 eligible participants, well above the requirement. Participants who agreed to the survey were asked to complete demographic information and questions from three validated instruments, including the WSSQ, a validated 12-question survey used to identify individuals who would benefit from stigma reduction interventions (see Lillis et al., 2010). The RSE, a validated self-reported 10-item scale, measured feelings of self-worth and self-acceptance (see Rosenberg, 1965, 1989). The BSS, a validated 16-item survey where respondents evaluated16 body parts. (see Slade et al., 1990). Data from each instrument were reported as the summed score for each tool

Once the number of participants was met, the survey was closed. I cleaned the participants' data by excluding responses from participants who did not meet the inclusion criteria and any answers that had extraneous or impossible values. The cleaned data were prepared by variable for final analysis in SPSS. The results of the multiple regression analysis are discussed in detail in Chapter 4.

# Chapter 4: Results

In this study, I explored the relationship between SE and BD and their effect on IWS. These factors are known contributors to the worldwide epidemic of obesity and affect an individual's physical, social, and psychological well-being (CDC, 2020; Ciciurkaite & Perry, 2018; Grosso et al., 2019). The research question was: What was the relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women?

$H_0$: There was no relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women.

$H_a$: There was a relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women.

In this chapter, I detailed the data collection and analysis process as well as the survey results, including the number of surveys deployed, response rate, and any deviations from the original data plan. Additionally, descriptive demographic information is provided to show an overview of the study population and how generalizable the sample is to the larger population. The multiple linear regression analysis results are also presented along with ad hoc analysis that support the study findings and answers the research question.

## Data Collection Procedures

The data were collected in the manner outlined in the collection plan provided in Chapter 3. I developed the survey using the validated questions from the BSS, RSE, and WSSQ and questions to elicit demographic information. The survey was coded before

launch based on the authors' instructions. The BSS asked the respondent to rate their satisfaction or dissatisfaction with 16 different body parts using a 7-point Likert scale as follows: 1 = *very satisfied*, 2 = *moderately satisfied*, 3 = *slightly satisfied*, 4 = *undecided*, 5 = *slightly unsatisfied*, 6 = *moderately unsatisfied*, and 7 = *very unsatisfied* (see Slade et al., 1990). The RSE instrument is a 4-point Guttman scale that measures a respondent's self-esteem and was coded as follows: Questions 1, 3, 4, and 7 are reverse coded: 3 = *strongly agree*, 2 = *agree*, 1 = *disagree*, and 0 = *strongly disagree*. Questions 2, 5, 6, 8, and 9 are coded as 0 = *strongly agree*, 1 = *agree*, 2 = *disagree*, and 3 = *strongly disagree* (see Rosenberg, 1979). Finally, the WSSQ is a 12-item instrument with two subscales measuring IWS and fear of enacted stigma. The tool can be scored either by subscales or as a full scale using a 5-point Likert scale as follows: 1 = *completely disagree*, 2 = *disagree*, 3 = *neither agree nor disagree*, 4 = *agree*, and 5 = *completely disagree* (see Lillis et al., 2010). In this research, I totaled the sum of scores for each participant for the full scale of the WSSQ and the BSS. The RSE scale was calculated using the Guttman scale: Item 1 was a combination of scores for Questions 3, 7, and 9, and Item 2 was the combination of Questions 2 and 4. Questions 3, 4, and 5 were scored separately, and the last item was the combination of Questions 2 and 6. Calculations were made for each participant and reported as the sum of the scale.

**Recruitment and Response Rate**

I posted a description of the survey and a link to access the survey to four social media (Facebook) groups. Additionally, the survey was deployed on the internet by SurveyMonkey to a targeted pool of participants using two filters: one narrowed the

audience of 30–44-year-olds, and the second narrowed ethnicity to Latino. Participants who clicked the link were directed to the informed consent page and confirmed their agreement to participate by answering "yes" to the first question. Invitations to participate were posted on August 12, 2021, with a proposed close date of August 19, 2021. However, SurveyMonkey delivered 261 completed survey responses by August 13, 2021, closing the survey. In total, 318 surveys were sent, making the response rate 82% and the abandon rate 18% (SurveyMonkey, n.d.). No social media (i.e., Facebook groups) surveys were completed during this time, and surveys were closed. There were no deviations from the data collection plan discussed in Chapter 3; however, there was no time to post the recruitment flyers because the survey responses were gathered quickly.

**Data Cleaning**

I employed G*Power analysis using a medium effect of 0.15, an alpha of 0.5, and a power of .80 to calculate a total of 68 participants were needed for this study to meet the medium effect threshold. SurveyMonkey yielded 261 responses that the following inclusion criteria had narrowed: female, a BMI of 30 or greater, identifying as Hispanic, age between 30–44-years-old and not currently enrolled in a commercial or medical weight loss program. The data were reviewed first for the male gender; as a result, 108 male respondents were excluded, followed by nine exclusions for age and another 30 for a BMI of less than 30. Another three participants did not identify as Hispanic, and 24 respondents were currently enrolled in a commercial or medical weight loss program. In total, 174 or 67% of responses were excluded. The final sample of respondents ($N$ = 87)

met the inclusion criteria and sample size requirements, and their survey responses contained no missing data.

**Demographic Characteristics**

The sample respondents all met the inclusion criteria for the study; therefore, 87 participants identified as female, had a BMI of 30 or greater, were Hispanic, were between 30 and 44years-old, and were not currently enrolled in a commercial or medical weight loss program. Table 1 illustrates additional information about the study participants. Table 2 indicates the participants' state of residence.

**Table 1**

*Partial Descriptive Demographics of Study Participants*

| Variable | Measurement | Frequency | Percent |
|---|---|---|---|
| BMI | 30–40 | 60 | 69% |
| | Over 40 | 27 | 31% |
| Years obese | Less than 1 year | 11 | 13% |
| | 1–3 years | 18 | 21% |
| | 4–7 years | 25 | 29% |
| | 8–10 years | 14 | 16% |
| | More than 10 years | 19 | 22% |
| Education | Less than high school | 6 | 7% |
| | High school or GED | 32 | 37% |
| | Undergraduate | 28 | 32% |
| | Graduate | 21 | 24% |

*Note*. $N = 87$. GED is the abbreviation for Graduate Educational Development

**Table 2**

*State of Residence of Study Participants*

| Variable | State | Frequency | Percent ($N$ = 87) |
|---|---|---|---|
| Residence | Arizona | 6 | 6.9% |
| | California | 25 | 28.7% |
| | Florida | 12 | 13.8% |
| | Nevada | 3 | 3.4% |
| | New York | 8 | 9.2% |
| | Texas | 8 | 9.2% |
| | Alabama, Connecticut, Georgia, Illinois, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Missouri, Nebraska, New Jersey, Ohio, Oregon, Pennsylvania, Tennessee, Utah, West Virginia, and Wisconsin | 25 | 28.7% |

*Note.* States with two or fewer responses were recorded as one group.

The participant sample was a homogenous group of English-speaking, Hispanic women living in the U. S. who met the criteria for the study. However, several factors, including country of origin, level of acculturation, and adherence to U.S. beauty ideals, were beyond the scope of this research and limited the generalizability of this study to the larger population. Statista (2021) estimated that 6.8 million obese Hispanic women live in the U. S., and this sample represents less than 1% of those women.

**Validation and Reliability of the BSS**

Slade et al.'s (1990) original validation study for the BSS tool was done on all-female samples of college students (N = 122), nursing students (*N* = 463), female volunteers (*N* = 100), overweight subjects (*N* = 169), and patients with eating disorders (N = 84). Demographic data were collected for height, weight, and age for all groups. ANOVAs demonstrated significant differences between the five groups for all measures. The overweight group was older, shorter, and heavier than the control groups, and the eating disorder groups weighed less than the other groups (Slade et al., 1990).

Component analysis was done on the college group (*N* = 122), and two factors were identified (see Slade et al., 1990). The analysis yielded three scales: (a) the general BD score is derived by summing all 16 scores; (b) head dissatisfaction is the sum of the seven scores for items above the head, including head, face, jaw, eyes, teeth, nose, and mouth; and (c) BD is the sum of scores for the seven parts below the head, including shoulders, chest, tummy, arms, hands, feet, and legs (Slade et al., 1990).

ANOVAs between the samples were found to be highly significant (Slade et al., 1990). General BD showed that the eating disorder and overweight groups were significantly different from the other groups. The nursing student scores were significantly lower than the college student scores. Head satisfaction findings were identical to those for general BD. BD showed a significant difference between the eating disorder and overweight groups, and nurses scored lower than the volunteer and college groups. A final check on the internal consistency for the full, head, and body scales was

done by calculating Cronbach's alpha above the .80 range, confirming the internal reliability of the three scales (see Slade et al., 1990).

**Validation and Reliability of the WSSQ**

The WSSQ is a 12-item scale intended for screening overweight and obese adults and not designed for use on individuals with a normal BMI (Lillis et al., 2010). The WSSQ tool captured participant responses about the concept of weight self-stigma using two subscales: fear of enacted stigma and self-devaluation. The initial validation of this tool by Lillis et al. (2010) began with investigating 300 attributes that were thought to be reflective of stigma. After analysis 30 attributes were retained for further analysis of the WSSQ. The 30-item scale was tested on 10 overweight participants enrolled in a weight loss program, which resulted in another eight attributes being dropped due to redundancy (see Lillis et al., 2010).

Data from the two sample groups were combined ($N$ = 169), and participants completed several existing instruments, including BMI measurements, GHQ, BSI, and others, as discussed in Chapter 3. The remaining 22 items underwent an exploratory components analysis, and an additional six items were removed from the scale based on redundancies found in fear of enacted stigma factor (Lillis et al., 2010). An oblique rotation was done on the 12 remaining items, and Factor 3 was dropped; the data fit a two-factor solution with six items loading on fear of enacted stigma and six factors loading on weight self-stigma (see Lillis et al., 2010). The final 12-item WSSQ had a Cronbach's alpha of 0.878, while the subscale for fear of enacted stigma had an alpha of 0.869 and the weight self-stigma subscale had an alpha of 0.812 (see Lillis et al., 2010).

**Validation and Reliability of Rosenberg's Self-Esteem Scale**

The RSE is a 10-item Guttman scale with a reproducibility of 92% and a scalability coefficient of 72% (see Rosenberg, 1979). Rosenberg (1979) measured construct validity for theoretical alignment with SE by testing the relationship of depressive affect, anxiety, and peer-group reputation. The depressive effect had a clear relationship between the SE scale and the six-item Guttman scale based on the New York State study ($N$ = 272) measuring self-stability (see Rosenberg, 1979). The SE scale showed that participants who scored as having high SE (4%) and those with low SE (80%) were rated as highly depressed ($r$ = .3008). Anxiety was more highly correlated ($r$ = .4848) for 69% of participants who self-identified as having low SE than the 19% who reported having high SE. Peer-group reputation was measured in 272 high school students. In the New York State study, those with high SE were most likely to participate in extracurricular activities, be elected to the student council, and become opinion leaders.

Rosenberg's original research did not report the Cronbach alpha but stated internal consistency was between .77 and .88 and were dependent on the study design.

**Reliability of Current Study**

In the current study, I calculated the sum of scores for each question in the tool for each participant. The Cronbach alpha for the BSS tool was .912, an excellent measure of internal consistency and higher than Slade et al.'s (1990) original study. The alpha for the WSSQ in the current study was .873, based on the responses to the full scale, which is a good measure of internal reliability and consistent with Lillis et al.'s (2010) findings.

The RSE scale was calculated using the Guttman, six-item scale. The contrived scores for each participant resulted in a Cronbach's alpha of .877, again a good measure of internal reliability and consistent with Rosenberg's (1979) findings.

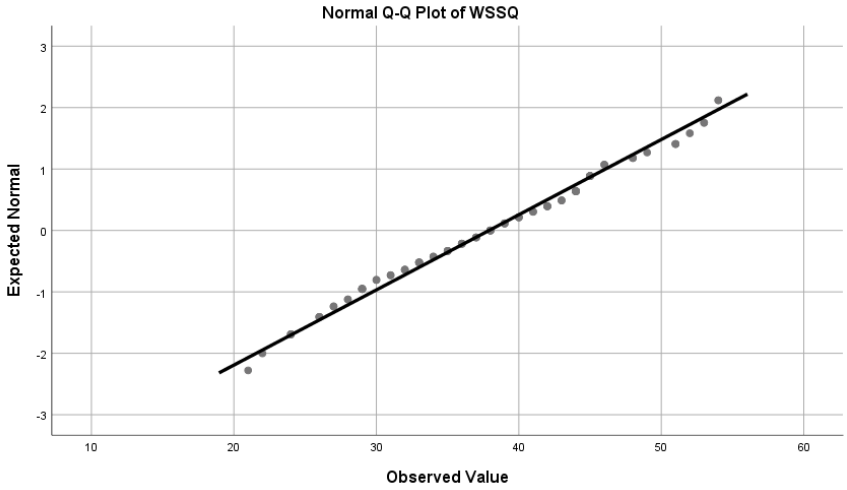
## Study Results

I performed a multiple regression analysis in SPSS 25.0 to determine the relationship between SE and BD and their effect on IWS in 30-44-year-old, obese, Hispanic women. The null hypothesis stated there was no relationship between SE and BD and their effect on IWS in 30-44-year-old, obese, Hispanic women. The variables were the sum of respondent scores on the RSE, BSS, and WSSQ. The BSS measured BD and serves as a predictor variable. The RSE measured SE and was also a predictor variable. The WSSQ was the dependent variable, which is a measure of IWS.

The regression analysis had several assumptions that had to be met. First, the variables must be evenly distributed. Secondly, there must be an absence of outliers. Third, there should be no relationship between the independent and dependent variables, and there should be an absence of multicollinearity between the independent variables (Grande, 2015). To confirm that the variables were normally distributed, a test of normality was confirmed for each variable. Figure 2 illustrates the Q-Q plot graph for the dependent variable, WSSQ, which showed a normal distribution of participant scores.

**Figure 2**

*Q-Q Plot: WSSQ*




Additionally, the Shapiro-Wilk and Kolmogorov-Smirnov tests of normality in Table 3 illustrated that the assumption of normality for the WSSQ has been met with *p* values greater than 0.05.

**Table 1**

*Tests for Normality: WSSQ*

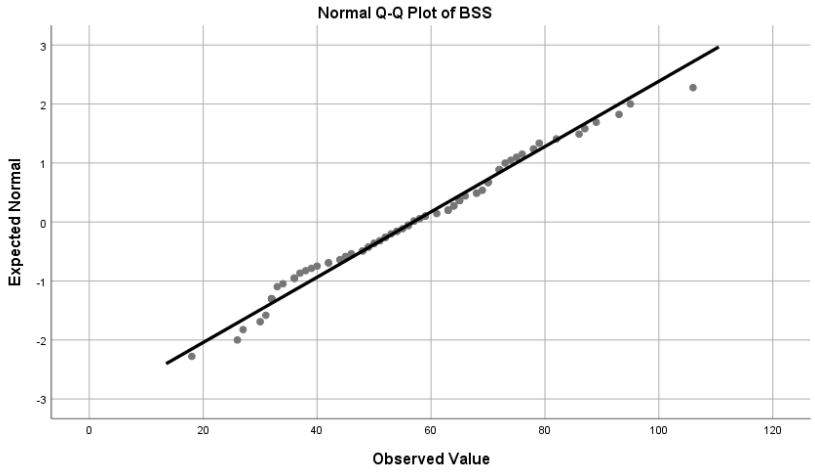
| Komogorov-Smirnov | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|
| Statistic | *df* | Sig. | Statistic | *df* | Sig. |
| .064 | 87 | .200 | .983 | 87 | .310 |

*Note*. Adapted from SPSS version 25.0 output.

Figure 3 illustrated the Q-Q plot for the participant BSS scores. However, there was some deviation from the line, but the data was normally distributed.

**Figure 3**

*Q-Q Plot: BSS*




Normality was further confirmed by the Shapiro-Wilk and Kolmogorov-Smirnov tests; both demonstrated a significance level greater than 0.05, as noted in Table 2.

**Table 2**

*Tests for Normality: BSS*

| Komogorov-Smirnov | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|
| Statistic | *df* | Sig. | Statistic | *df* | Sig. |
| .069 | 87 | .200 | .983 | 87 | .316 |

*Note*. Adapted from SPSS output version 25.0.

Figure 4 is an illustration of the Q-Q plot for the participant RSE scores. Although there was some deviation from the line, the data were normally distributed**.** Normality

was further confirmed by the Shapiro-Wilk and Kolmogorov-Smirnov tests, which both showed a significance level greater than 0.05, as noted in Table 3.

**Figure 4**

*Q-Q Plot: RSE*

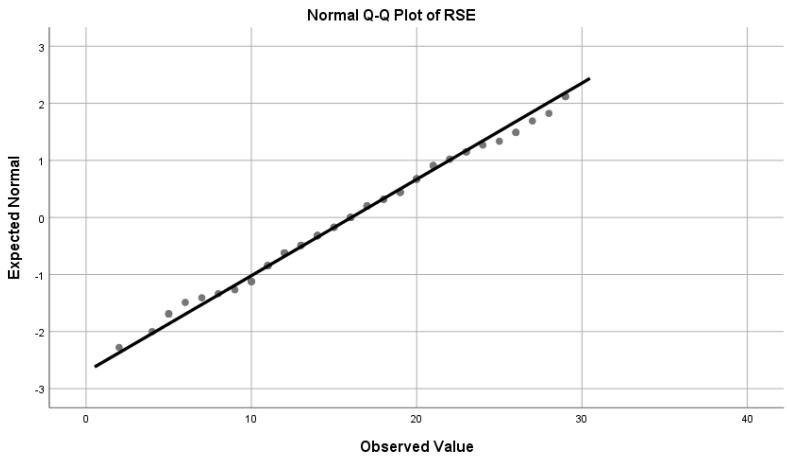



**Table 3**

*Tests for Normality: RSE*

| Komogorov-Smirnov | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|
| Statistic | *df* | Sig. | Statistic | *df* | Sig. |
| .057 | 87 | .200* | .988 | 87 | .616 |

*Note*. Adapted from SPSS version 25.0 output.

**Descriptive Statistics**

The descriptive statistics in Table 4 provide the mean, standard deviation, and the number of participant scores for each variable. Table 5 are the correlations between variables.

**Table 4**

*Descriptive Statistics*

| | *M* | *SD* | *N* |
|---|---|---|---|
| WSSQ | 40.63 | 8.734 | 87 |
| BSS | 56.90 | 18.066 | 87 |
| RSE | 16.05 | 5.926 | 87 |

*Note*. Adapted from SPSS output version 25.0.

**Table 5**

*Correlations*

| Pearson Correlation | | WSSQ | BSS | RSE |
|---|---|---|---|---|
| Pearson Correlation | WSSQ | 1.000 | .501 | –.584 |
| Sig. (1-tailed) | BSS | .501 | 1.000 | –.521 |
| | RSE | –.584 | –.521 | 1.000 |
| Sig. (1-tailed) | WSSQ | | .000 | .000 |
| N | BSS | .000 | | .000 |
| | RSE | .000 | .000 | |
| N | WSSQ | 87 | 87 | 87 |
| | BSS | 87 | 87 | 87 |
| | RSE | 87 | 87 | 87 |

*Note*. Adapted from SPSS output version 25.0.

**Regression Analysis**

I performed multiple linear regression to predict IWS based on the participants' sum of scores for BD and SE. There was no violation of normality, linearity, or multicollinearity. Table 6 illustrates a significant regression equation was found ($F$ (2,84) = 27.253, $p < 0.05$) with a $R^2 = .394$. Participants predicted IWS is equal to 43.692, BSS is equal to .130, and the coefficient for SE is equal to –.653. The BSS and RSE are both significant predictors of IWS. The beta (β) provides an idea of the influence each

predictor variable has on the outcome variable when the effect of the other variable is held constant. Therefore, BSS ($\beta_1$ = .270) means that as BD increases by one unit, SE (RSE) decreased by –.443.

Conversely, RSE ($\beta_2$ = –.443) means that as SE decreases by one unit, (BSS) BD increased by .270. SE and BD are predictors of IWS. The 95% confidence lower boundary for BSS was .035, and the upper boundary was .226. RSE has a lower boundary of –.945 and an upper boundary of –.231. The partial correlations provide information on the unique contribution of each variable. In this model, the contribution of RSE to the variance on IWS is higher (–.437) than BSS, which has a contribution of .283. The standard residual range was –1.955 to 2.543, and Cook's distance was .000 to .168. The ANOVA table indicated the model was significant with a $p < .0.05$. Therefore, the null hypothesis was rejected; there was a relationship between BD and SE on IWS in 30-44-year-old, obese, Hispanic women.

**Table 6**

*Regression Model*

| | | | | Std. Error of | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .627[a] | .394 | .379 | 6.882 | .394 | 27.253 | 2 | 84 | .000 |

*Note*. Adapted from SPSS output version 25.0

The ANOVA, Table 7, indicated the differences between and within groups (sum of squares) was significant with a $p < .0.05$. Therefore, the null hypothesis was rejected. There was a relationship between BD and SE and their effect on IWS in 30-44-year-old, obese, Hispanic women.

**Table 7**

*ANOVA*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 2581.631 | 2 | 1290.815 | 27.253 | .000 |
| | Residual | 3978.599 | 84 | 47.364 | | |
| | Total | 6560.230 | 86 | | | |

Table 8 is the coefficient table for the regression model

**Table 8**

*Coefficients for Independent Variable: WSSQ*

| | B | Std. Error | Beta | *t* | *Sig.* |
|---|---|---|---|---|---|
| (Constant) | 43.692 | 4.508 | | 9.693 | .000 |
| BSS | .130 | .048 | .270 | 2.708 | .008 |
| RSE | –.653 | .147 | –.443 | –4.449 | .000 |

*Note*. Adapted from the SPSS output version 25.0

## Summary

This quantitative, correlational study explored the relationship between SE and BD and their effect on IWS in obese, Hispanic women between 30 and 44-years-old. Obesity is the largest and costliest single risk factor for chronic disease in the United States, affecting 42.7% of the population. Underrepresented populations are disproportionately affected by obesity and suffer a greater risk of developing chronic disease (Altman et al., 2017; CDC, 2019; McLaughlin et al., 2017; Statista, 2021).

This chapter provided information on the data collection process, including the instruments used and how they were coded. Additionally, I provided information on the recruitment of participants, timeframe, the response rate, and any deviations from the proposed data collection plan. Finally, I presented the results of a multiple linear regression analysis, which was performed to predict IWS based on participant sum of scores for BD and SE. There was no violation of normality, linearity, or multicollinearity. A significant regression equation was found ($F$ (2,84) = 27.253, $p < 0.05$) with an $R^2$ = .394, and the null hypothesis was rejected, there was a relationship between BD and SE on IWS in 30-44-year-old, obese, Hispanic women.

In Chapter 5, I provided a deeper discussion of the study findings, the generalizability of the results to the larger population, and the current study's limitations. Additionally, I present recommendations for future research and the implications of this research for positive social change.

# Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative, correlational study was to assess the relationship between the independent variables of SE and BD and the dependent variable of IWS in 30–44-year-old, obese, Hispanic women. I recruited participants with an invitation to participate posted on the internet through SurveyMonkey and social media (i.e., Facebook) groups. The data points were the participants' self-reported answers to demographic data and the summed scores of three validated instruments (a) the RSE, which measured SE; (b) the BSS, which measured BD; and (c) the WSSQ, which measured IWS (see Lillis et al., 2010; Rosenberg, 1965;1989; Slade et al., 1990). The survey was open to all women who met the inclusion criteria. Two hundred and sixty-one surveys were returned, which yielded a sample size of 87 after the data were cleaned.

I performed multiple linear regression analyses to predict IWS based on the participant's sum of scores for BD and SE. BD and SE are predictors of IWS. There was no violation of normality, linearity, or multicollinearity.

## Interpretation of Findings

Given the regression analysis results, I rejected the null hypothesis; therefore, there was a relationship between SE and BD and their effect on IWS in 30–44-year-old, obese, Hispanic women. The regression equation was significant, which showed an $F$ statistic of 27.253 and a $p$-value $< 0.05$). The BSS and RSE were both significant predictors of IWS. The beta (β) provided the statistical influence of each predictor variable on the outcome variable when the effect of the other variable was held constant.

Therefore, BSS demonstrated that as BD increased by one unit ($\beta_1 = .270$), SE decreased by –.443.

Although no current studies existed on the relationship between these variables, there was evidence that SE, BD, and IWS were significantly correlated in the literature, although separately. Therefore, this study adds to the growing body of knowledge on factors that contribute to IWS. Additionally, this study provided a cultural viewpoint of obese Hispanic women, which significantly adds to the research on this diverse population.

**SE and BD**

The findings of this study are consistent with those of other researchers throughout the current literature. Several studies confirmed internalized stigma was related to feelings of isolation, low SE, BD, decreased socialization, feelings of shame, prejudice, discrimination, labeling, and stereotyping (Essayli et al.,2017; Grosso et al., 2019; Ibrahim et al., 2019; Kim et al., 2019; Meadows & Higgs, 2020; Puhl et al., 2017; Whittle et al., 2017). In addition, Engur and Karagol (2020) noted that several older studies confirmed that obese individuals had lower SE, depression or stigma may be a factor for low SE in obese individuals, and existing low SE may play a role in obesity for some individuals. In their study on the accuracy of body perception, the researchers measured the differences in SE, body weight perception, and body perception. They found that obese individuals had lower SE, were less pleased with their bodies (i.e., BD), and perceived themselves as having a lower BMI (Engur & Karagol, 2019).

Initial research on internalized stigma and SE were rooted in the stigma surrounding patients with psychiatric disorders. One study on internalized stigma, SE, and mental illness disclosure reported that high internalized stigma was associated with low levels of SE (Lim et al., 2019). Another study, outside of the obesity literature, explored BD and its link to loneliness in two age cohorts (Barnett et al., 2020). The researchers also hypothesized that stigma consciousness mediated BD. Their findings confirmed that BD was related to greater loneliness and was mediated through stigma consciousness. Although internalized stigma has been measured in other domains (i.e., loneliness and mental illness), the findings are consistent with the current study.

Essayli et al. (2016) measured the impact of weight labels on body image, IWS, affect perceived health, and intended weight loss behaviors in normal weight and overweight college women. Participants who were labeled overweight had greater BD than those labeled as normal weight. IWS was also significantly higher for participants labeled as overweight than those with a normal weight label. Therefore, the impact of weight labels on BD and IWS was significant.

Lim (2021) examined the mediating role of SE on the relationship between Instagram users' selfie-posting behaviors and BD measured by the need for popularity. The results showed a significant, negative, indirect effect for Instagram selfie posting on BD mediated through SE, which was significant when the users' need for popularity was low. The researcher noted a growing concern about the negative effects of selfie posting on BD (Lim, 2021).

**IWS**

IWS is a relatively new concept that developed from the research on internalized stigma. Lim et al. (2019) wrote that socially unacceptable individuals internalize negative thoughts about themselves; this was supported by the SI assumption that people respond to things based on meaning (Blumer, 1963). Puhl et al. (2017) wrote that individuals who associate themselves as members of a stigmatized group might internalize those negative stereotypes, which was supported by the research of Grosso et al. (2019), Kim (2020), Lim et al., and Whittle et al. (2017). Additionally, higher weight individuals devalue themselves because of their weight and internalize those negative feelings (Meadows & Higgs, 2020). IWS "is the self-directed stigmatizing attitudes people hold based on social stereotypes about their perceived weight status" (Lee et al., 2019, p. 2). The conceptualization of internalized stigma is further confirmed by Mead (1934), who stated that the self is the perception an individual has of themselves based on interactions with others in society.

A growing body of knowledge reveals the negative effects of IWS. For example, Lee et al. (2019) developed a model to evaluate the relationship between IWS, social, psychological, and behavioral variables. The researchers tested two models for fit: the sociocultural model and stigmatizing experiences. However, only the sociocultural pressures model showed a significant relationship for IWS, social, psychological, and behaviors. The final sociocultural model demonstrated that IWS was significantly related to shame, BD, appearance comparisons, and social norms (Lee et al., 2019).

Puhl et al. (2017) described a study on the prevalence, severity, and sociodemographic factors associated with IWS. Data were collected from three different groups, and correlation and regression analysis were completed using each group's demographic characteristics, BMI, weight status, and IWS. The researchers found that 52% of participants endorsed a strong association with IWS. Women reported the highest levels of IWS. In comparison, Black and Latino participants had lower levels of IWS than White participants.

According to Lee et al. (2019), weight stigma continues to be an acceptable form of discrimination in the United States and continues to increase despite focused attention on reducing weight bias. Unfortunately, weight bias and IWS affect every domain of an individual's life, including friendships, family, and intimate relationships, which leads to greater BD and lower SE (Chin & Armstrong, 2019; Lee et al., 2019).

Little research exists on IWS, and most studies on the topic have been done with samples of White adolescent girls or young women (Opara & Santos, 2019). The current study focused on understanding the relationship between SE and BD and their effect on IWS in obese, Hispanic women aged 30–44 years old. Understanding how these variables affect women of diverse ethnicity adds culturally specific knowledge that can be used to drive appropriate interventions, treatments, and education in the fight against obesity.

Meadows and Higgs (2020) outlined four components needed for individuals to experience IWS: awareness of negative societal stereotypes for weight, acceptance of the validity of negative judgments, identification with members of a stigmatized group, and experiences that decrease their self-worth. Their research focused on determining if IWS

was a predictor for the progression of food addiction. The participants were surveyed using one question about food addiction and 12 questions from the WSSQ at two different time intervals. The results demonstrated that fear of stigma was positively associated with the progression of food addiction at follow-up but not at baseline. IWS had no association with food addiction progression at follow-up but was positively correlated at baseline. (Meadows & Higgs, 2020).

The findings of the current study are consistent with Rosenberg's (1979) four components of self-consistency and SE described as the "protection of self" (p. 57). Reflected appraisal, social comparisons, self-attribution, and psychological centrality provide insight into the development and sustainability of a person's SE and body satisfaction. The reflected appraisal is the influence of attitudes by others, their view of others as a person, and ultimately how an individual comes to view themselves. Therefore, individuals who have a negative view of themselves will internalize those feelings and may suffer from low SE. When the reflective view of self is focused on the body, the individual may suffer from BD.

Fundamental to self-concept are social comparisons, where individuals learn about themselves by comparing themselves to others (Rosenberg, 1979). Rosenberg (1979) described two social comparisons: superior to inferior (i.e., smarter or dumber, weaker or stronger) and richer or poorer. The second comparison is deviance to conformity, where deviance is determined by the group or larger society norms (Rosenberg, 1979). For example, obesity in the U.S. is considered deviance from norms; not subscribing to Eurocentric beauty ideals is considered a deviation from the norm and

may play a significant role in low SE, BD, and IWS (Ciciurkaite & Perry, 2018; Lee et al., 2019; Rosenberg, 1979; Winter et al., 2019).

Self-attribution is the repeated internal, often negative, descriptive statements individuals make to themselves (Rosenberg, 1979). This principle is often referred to as the negative self-talk that humans engage in unconsciously, which undermines an individual's SE.

Psychological centrality is the belief that self-concept is not a collection of parts but a complex organizational process that includes intelligence, morality, honesty, and courage essential for self-identity (Rosenberg, 1979). It is responsible for SE, body satisfaction, and internalized feelings.

**SI**

Throughout this research, I used SI and the nursing metaparadigm as a framework to understand the participants' dynamic interpretative meanings of SE, BD, and IWS. The foundational assumptions of SI and interpretative meaning are evident throughout the literature and confirmed by the current study results. People respond to SE and BD (i.e., objects) based on meaning within their environment. The symbols (i.e., meaning) of an individual's health are derived or arise from social interactions, which are positive or negative (i.e., IWS). People use interpretative processes to acknowledge, understand, and modify the meaning of things over time (Blumer, 1969). The self is the perception a person has of themselves based on interactions with others in society (Mead, 1934), which includes the culture surrounding obesity in today's society. Lee et al. (2019) described weight as the most acceptable form of discrimination today. Individuals

experience SE, BD, and IWS through a lens of societal norms and meaning, supported by the findings in the current study of a significant inverse relationship between SE and BD in terms of their effect on IWS.

## Limitations of the Study

The scope of this study was limited to a quantitative analysis of data collected from a homogenous group of English-speaking, Hispanic women living in the United States. The participant sample ($N$ = 87) self-reported being female, Hispanic, between the age of 30 and 44 years old, with a BMI of 30 or greater, which is not representative of all Hispanic women. Statista (2021) estimated that 6.8 million obese Hispanic women live in the United States who vary in age, English fluency, and BMI. Therefore, the study population is not representative of the larger population.

Several additional factors limit the generalizability of this study to the larger population, including the participant's country of origin, level of acculturation, and cultural beliefs about beauty ideas. Altman et al. (2017) compared weight status evaluations for five cohorts of women: Mexican nationals, Mexican immigrants, United States-born Mexican women, and United States-born non-Hispanic Whites. The researchers found that Mexican nationals are less critical of their weight status, but over time, through the integration process, their weight status evaluations favored the ideals of White women (Altman et al., 2017).

Another limitation is whether the participant subscribed to a Hispanic or Eurocentric beauty ideal. Ciciurkaite and Perry (2017) described the Latina Paradoxical Body Image as the intersection of body weight paradigms. The U.S. cultural values and

body image norms compete with the norms and values of a women's home country. For example, U.S., White women subscribe to a culture of thin, waif-like beauty; contrastingly, Latino/Hispanic women value curvy, fuller figures (Opara & Santos, 2019).

## Recommendations

I have several recommendations for future research based on the findings in the current study, including interventions to decrease IWS. Puhl et al. (2017) examined the prevalence and sociodemographic correlation for IWS and showed there is clear evidence that IWS contributes to poor psychological and physical health. The significance of their study is the ability to target specific interventions, education, and advocacy for obese individuals who internalize stigma because of their weight (Puhl et al., 2017).

Lee et al. (2019) discussed creating a model to evaluate the risks and benefits of IWS and inform the development of interventions related to sociocultural factors. The researchers described the model as a starting point that can drive strategies to combat IWS and greater advocacy for the diversity of beauty ideals and how they are portrayed by the media, fitness, and beauty industries (Lee et al., 2019).

Additionally, research that explores SE, BD, and IWS using a feminist intersectionality framework could provide expanded knowledge on how social identities are compounded by other characteristics such as age, race, or gender to create greater discrimination. Grosso et al. (2019) described intersectional stigma as compounded stigma, or the experience of multiple stigmas directed towards an individual. Grosso et al.'s research on stigma in homosexual men provides an example of how intersecting

stigmas contribute to decreasing health-seeking behaviors, decreased physical and mental health, and social isolation. Therefore, are the effects of the relationship between on IWS impacted by additional social or political factors?

Finally, research on the level of acculturation will expand the knowledge of the relationship between SE and BD and their effect on IWS both at the micro and macro levels. Specifically, is acculturation or integration to a host country impacted by country of origin, time in the host country, or willingness to learn the host country's language. Alarcon et al. (2016) described acculturation as a powerful but conflicting force, where immigrants strive to keep their cultural norms and strive to integrate into the host country. This juxtaposition is manifested in the Latina Paradoxical Body Image, described by Ciciurkaite and Perry (2018). The paradox is the intersection of body weight paradigms between a woman's native and host countries. American White women subscribe to a Eurocentric culture of beauty that includes thin and fit body ideals, where Latino/Hispanic women value curvy, fuller figures (Winter et al.2019). Additional recommendations should also explore the relationship of SE and BD and their effects on IWS with the intersection of genetics, social determinants of health, and peer pressure in Latina women.

Altman et al. (2017) explored how weight evaluation and BD affect Mexican women (Hispanic) as they assimilate into the U.S. social environment. A binational study explored the migration and acculturation processes for Mexican, White, and Black women. The results demonstrate that highly integrated Mexican women self-evaluate their weight equally with U.S.-born White women (Altman et al., 2017).

## Implications

The current study adds new nursing knowledge about the relationship between SE and BD and their effect on IWS in 30-44-year-old, obese, Hispanic women. The quantitative analysis demonstrates that a decrease in SE is significantly associated with an increase in BD and IWS. The literature substantiates the relationship between IWS and obesity. Therefore, in order to create positive social change at the population health level, there must be an acknowledgment that obesity is a multifaceted problem affecting an individual's physical, social, and psychological well-being (Brenner et al., 2019; Kim et al., 2019; Lim et al., 2019; Meadows & Higgs, 2020; Puhl et al., 2018). The current literature has provided abundant evidence that obese adults suffer from increased psychological distress, including depression, anxiety, social isolation, low SE, increased BD, and eating pathology (Brenner et al., 2019; CDC, 2020; Puhl et al., 2017). Additionally, obesity significantly increases the risk of developing chronic diseases like hypertension, stroke, some cancers, cardiovascular disease, and Type 2 diabetes (CDC, 2020). Palmeira et al. (2018) described obesity as one of the most serious global health problems today and growing despite the many available interventions for weight loss.

The significance of this new research on the relationship between SE and BD and their effect on IWS to create positive social change lies in creating new knowledge that identifies new correlates for IWS and incorporates cultural competence. Ciciurkaite and Perry (2018) described the need for more accurate comparisons within racial, ethnic, and socioeconomic groups to overcome often weak or contradictory research on obesity for diverse populations. For instance, the Hispanic population is the fastest-growing minority

group in the United States. Nevertheless, there is limited research on how the relationship between SE and BD impacts IWS in obese Hispanic women (Opara & Santos, 2019). The upstream effects of obesity on chronic disease as a population problem requires continued investigation, innovative approaches to care, and focused attention on the underlying physical and psychological causes of obesity.

This new research provides clinicians with actionable knowledge to design interventions, develop culturally relevant education, inform public policy, and provide advocacy. Ethnically specific evidence can improve the social and health outcomes for the identified individuals by ensuring culturally appropriate evidence-based strategies respect the group's traditions, habits, and beliefs.

Finally, the significance of this study to theory is the generation of a model grounded in sociology and nursing, framed by dynamic interpretive meaning. The theoretical framework provided a foundation to investigate the interpretive social meaning of SE, BD, and its impact on IWS. The concepts, relationships, and assumptions of SI align with the nursing metaparadigm. Therefore, SI provided greater relevance to nursing theory when viewed through a lens of person, health, environment, and nursing (McEwen & Wills, 2019). SI theory has been used to frame past nursing research that explored social inequities, human interaction behaviors, health promotion, and intent to seek care in patients with chronic disease (McEwen & Wills, 2019).

In this study, SE, BD, and IWS are interpreted by the individual participant. Interpretative meaning of the variables is supported by the three assumptions of SI, including (a) human beings act towards things based on meaning, (b) the meaning of

things is derived from or arises from social interactions with others, and (c) individuals use an interpretive process to understand and modify the meaning of things (Blumer, 1969). For example, the combined model conceptualizes SE and BD as objects in the environment created through shared meaning and social interactions with others in the group (Blumer, 1969). Symbols are the positive and negative gestures that solicit a shared response from others. Symbols only exist if one can perceive and respond to them, as is the case for IWS. The actors are persons or groups who experience positive or negative thoughts about SE and BD (objects) as interpreted by the dominant group. Finally, actors assume roles based on the response to interactions within the group. The nursing role is to provide culturally appropriate education, intervention, and advocacy to the actors, thereby improving the social and health outcomes of the population (Blumer, 1969).

## Conclusions

First, the fragility of SE cannot be overstated. Self-consciousness matures through early childhood and is responsible for the formation of SE by around age seven (Kondratiuk, 2020; Lee et al., 2019; Rosenberg, 1979). Critically important to the maturation of self-consciousness are children's early experiences, either positive or negative, which play a significant role in developing identity, SE, and other's perceptions of them as individuals (James, 1890).

This study demonstrates that SE and BD have a significant inverse relationship; as SE drops, BD increases with IWS. Barnett et al. (2020) wrote that BD is linked to low SE in individuals across the lifespan and more prevalent in women. BD is the negative

subjective evaluation of one's physical body through extreme scrutiny of one's body parts, such as weight, figure, hip, or breast size (Opara & Santos, 2019).

Finally, positive social change is created when researchers explore what is relevant to a population. Culturally relevant studies inform interventions, help to develop culturally relevant education, inform public policy, and provide advocacy focused on creating opportunities for diverse equitable care for everyone. Cultural competence demands that people's values, beliefs, and traditions be respected and accounted for when developing strategies to improve the health of an individual, the community, and the population.

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Appendix A: Permission to Use the Weight Self-Stigma Questionnaire

Dorothy Burns
Tue 3/23/2021 1:24 PM
To: XXXXXXXX

Dr. Lillis,

I am a doctoral student at Walden University (PhD Nursing: Population Health) researching the relationship between SE and BD on internalized weight stigma in obese Hispanic women aged 30-44 years old. I would like to use Rosenberg's SE scale (1965;1989), BD scale (Slade et al., 1990), and the WSSQ by you and your colleagues to survey the target population. I plan on doing a quantitative study, using a correlational design (multiple linear regression) to explore how self -esteem and BD impact internalized weight stigma in a population that has not been well studied.

I feel the WSSQ is the best tool for my research to measure internalized stigma in obese populations and I am asking for permission to access and use the WSSQ as part of my doctoral research. If there is a specific site or way, I should be requesting this information, please let me know.

Thank you in advance,
Dorothy Burns MSN, MBA, RN, CCM, CPHQ

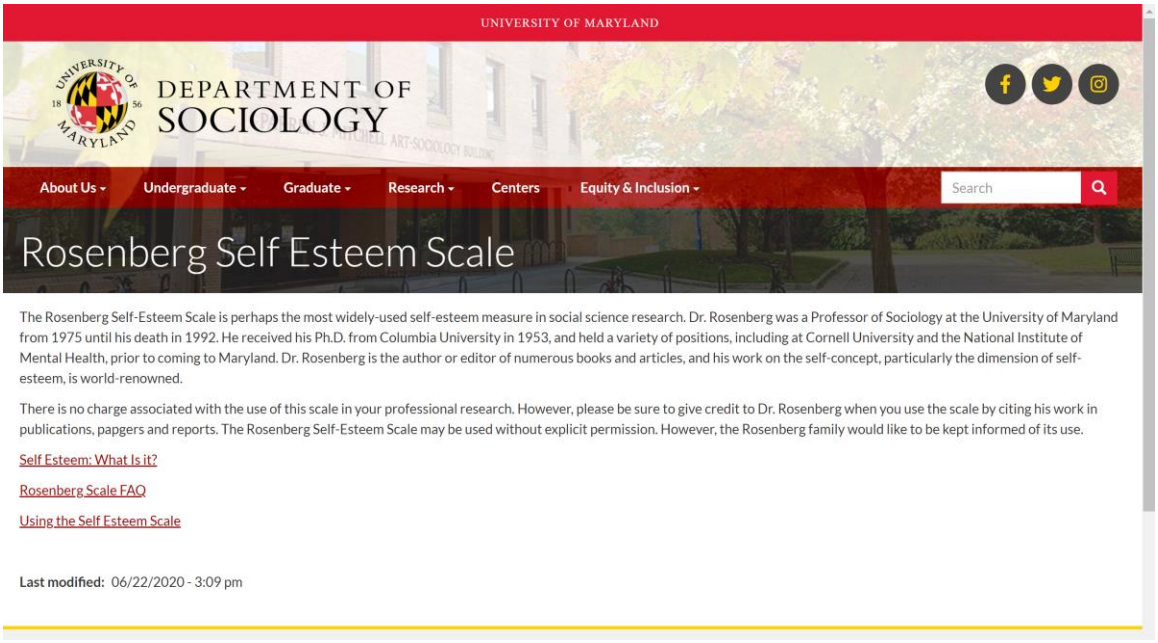
**Jason Lillis <XXXXXXXX >**
Tue 3/23/2021 1:45 PM
To: Dorothy Burns

I appreciate you asking. The WSSQ is non-copyright, so you are free to use as you see fit. BEst of luck with your study!

_____

Jason Lillis, Ph.D.
Associate Professor (Research)
Brown Medical School/ The Miriam Hospital
Associate Professor of Psychology
California Northstate University
XXXXXXXX on twitter

# Appendix B: Permission to Use Rosenberg Self-Esteem Scale



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## Rosenberg Self Esteem Scale

The Rosenberg Self-Esteem Scale is perhaps the most widely-used self-esteem measure in social science research. Dr. Rosenberg was a Professor of Sociology at the University of Maryland from 1975 until his death in 1992. He received his Ph.D. from Columbia University in 1953, and held a variety of positions, including at Cornell University and the National Institute of Mental Health, prior to coming to Maryland. Dr. Rosenberg is the author or editor of numerous books and articles, and his work on the self-concept, particularly the dimension of self-esteem, is world-renowned.

There is no charge associated with the use of this scale in your professional research. However, please be sure to give credit to Dr. Rosenberg when you use the scale by citing his work in publications, papgers and reports. The Rosenberg Self-Esteem Scale may be used without explicit permission. However, the Rosenberg family would like to be kept informed of its use.

Self Esteem: What Is it?

Rosenberg Scale FAQ

Using the Self Esteem Scale

**Last modified:** 06/22/2020 - 3:09 pm

# Appendix C: Permission to Use the Body Satisfaction Scale