Summer 7-24-2023

RACIAL DIFFERENCES IN THE STRONG BLACK WOMAN SCHEMA AND ITS RELATIONSHIP TO HEALTH BEHAVIORS AND PERSEVERANCE

Raegan Bishop

RACIAL DIFFERENCES IN THE STRONG BLACK WOMAN SCHEMA AND ITS RELATIONSHIP TO HEALTH BEHAVIORS AND PERSEVERANCE

by

Raegan A. Bishop

A Dissertation
Submitted to the Graduate School,
the College of Education and Human Sciences
and the School of Psychology
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

Approved by:

Dr. Tammy Greer, Committee Chair
Dr. Brenda Jenkins
Dr. Kenji Noguchi
Dr. Elena Stepanova

August 2023

Published by the Graduate School

ABSTRACT

Black women face a number of poor health outcomes, with 50% of Black women 20 years and older suffering from cardiovascular disease, and a diabetes incidence rate that is almost double that of White women. Health behaviors like physical activity, diet, and stress management can assist in reducing the onset and worsening of these diseases. However, Black women are less likely to engage in these behaviors compared to women of other races. Additionally, even when Black women do engage in positive health behaviors, they see fewer positive results than White women. One potential influencer in the complex relationship that Black women have with diet, exercise, and their health is the Strong Black woman schema (SBW), which purports that Black women are emotionally strong and more resilient than women of other races. This project investigated racial differences in the SBW schema, related individual differences in schema to health behaviors, and tested a scenario as a manipulation of the SBW schema. Indigenous and Black American women had higher SBW schema scores compared to White American women. SBW schema scores were not related to vigorous or moderate physical activity, but it was related to walking behaviors. Lastly, the scenarios were found to be ineffective in manipulating SBW schema.

ACKNOWLEDGMENTS

I would like to thank my committee members Dr. Tammy Greer, Dr. Brenda Jenkins, Dr. Elena Stepanova, and Dr. Kenji for their assistance and encouragement throughout this project. I would also like to thank my fellow Brain and Behavior graduate students for their support and help. Similarly, I would like to give special thanks to my dear friends for unconditional support and those kind words that you were always ready to provide. Lastly, I would like to thank my family for the unconditional love, counsel, and sympathetic ear that you all provided me as I completed my dissertation.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

CHAPTER I – THE STRONG BLACK WOMAN AND HEALTH BEHAVIORS

The Strong Black Woman schema (SBW) identifies the intrinsic and extrinsic pressures for Black women to be emotionally stronger, more persistent, more resilient, more self-reliant, and more nurturing of others than women of other racial groups (Jones & Shorter-Gooden, 2003). SBW schema has been cited as a potential influencer of health behaviors among Black women (Woods-Giscombe, 2010; Woods-Giscombe, et al., 2019). Black women suffer from disparities in health outcomes with rates of obesity nearly two times higher than that of White women (National Center for Health Statistics, 2018), maternal mortality rates that are 2.9 times higher than that of White women (Center for Disease Control, 2020), and hypertension rates that are 1.5 times higher than for White women (American Heart Association, 2020) culminating in life expectancies that are five years (75.8) shorter than the national average for White women in the U.S. (80.5; Arias, et al., 2021). Understanding the impact of cognitive schemas, like SBW schema on the health behaviors of Black women is imperative for effective chronic disease prevention counseling to reduce health disparities.

The purpose of this project was threefold. First, differences in identification with SBW between Black women and White women were investigated. While SBW schema is frequently spoken about among Black women as an influencer in their behaviors and decision-making, the phenomenon has yet to be isolated as unique to Black women. Assessing the differences between Black, Indigenous, and White women allowed for more objective evidence of the phenomenon's existence. Second, differences in the impact of SBW schema on health behavior engagement for Black, Indigenous, and White women were assessed. The impact of SBW schema on health behaviors is particularly

important considering the differences in health outcomes between Black and Indigenous women and White women. Third, experimental manipulation of SBW schema among Black women indicated whether the identification with the construct was a state versus trait. Although there is clear evidence from interviews that Black women identify with SBW schema, addressing identification and the negative impact depended on whether identification with the construct was malleable.

Strong Black Woman Schema

The Strong Black women schema (SBW), also known as the inner strength narrative, is the ideology that Black women are inherently emotionally stronger, more persistent, resilient, self-reliant, and more nurturing than other groups (Jones & Shorter-Gooden, 2003). Similar terms like John Henryism, SoJourner Syndrome, Sisterella Complex, and Superwoman Schema (SWS), all have themes of resilience, self-reliance, and emotional strength but other aspects differ (Mullings, 2005; Jones and Shorter-Gooden 2009; Woods-Giscombé, 2010). For example, John Henryism, defined as a strategy for dealing with the stressors from racism (Hudson, et al., 2016; James, et al., 1983; Logan, et al., 2015), does not focus solely on Black women and much of the research involves a number of different racial groups. Conversely, the Sisterella complex, the Superwoman Schema, and the SoJourner Syndrome are more similar to SBW schema as they focus solely on unique stressors and responses of Black women (West, 1995). However, the SoJouner Syndrome focuses on overall roles and identities, while the Sisterella complex is seen as a form of depression (Jones &Shorter-Gooden, 2003). The most similarly defined term is the Superwoman Schema. However, while it largely

focuses on strength, the SBW schema label focuses on self-reliance and has become the most common term in the literature.

SBW schema is theorized to have sociohistorical roots based on the adverse circumstances that Black women have faced throughout history (Harris-Lacewell, 2001). During slavery, Black women were viewed as mentally and physically stronger than White women, having abilities on par with that of Black men (Collins, 2009). This dehumanization allowed for the continued justification of mistreatment and violence towards Black women (Harrington et al., 2010). The combination of the high expectations of physical and emotional strength and the violence that enslaved Black women faced led to the internalization of the expectation of extraordinary levels of physical and mental strength among Black women that they then passed down to their daughters (West, Donovan, & Daniel, 2016). After slavery, Black women continued to face racialized violence and expectations of strength, further contributing to the internalization of the SBW schema characteristics (Collins, 2005; Woods-Giscombé, 2010). Even today, Black women often face racism and expectations of strength with many holding multiple roles within the family and community, including financial provider, caregiver, and community leader (Romero, 2000).

It is important to note that while Black women and men have faced similar systemic issues, there are a unique combination of factors that contribute to the existence of SBW schema among Black women and not Black men (Ferber, 2007; West, 1995). Black women and men face similar stereotypes of masculine characteristics such as physical and emotional strength. While for Black men, these masculine stereotypes align with societal expectations of masculinity, for Black women they can result in an

attempt to counter the stereotype. Attempting to counter the masculine stereotype may cause Black women to force down their true feelings, resulting in less engagement self-care behaviors and more risk-taking behaviors (Davis, et al., 2018; Ellemers, 2018; Jerald, et al., 2017). Furthermore, Black women often fill dual roles within and outside of the home, placing them under additional pressures that are unfelt by Black men. Black women are the largest group of women to be the primary breadwinner of their households (Flood, et al., 2018) but receive little reprieve in household duties (Wight, et al., 2013). Additionally, Black women also take on a large role in caregiving duties. Black women are the only group to report that their daughters are more likely to provide them with caregiving support than their spouses (Roth, et al., 2007). As such, Black women must fulfill the role of provider, household, manager, and caretaker, whereas Black men are not burdened with the same responsibilities. Subsequently, while Black women feel pressured to take on a number of roles while also facing unique systemic issues, Black men face fewer roles and deal with societal expectations that are exaggerations of stereotypes for men, preventing them from dealing with the same complexities (Davis, et al., 2018). Further still, the lack of support that Black women receive in the various roles they fill may contribute to their feelings of self-reliance and independence. Research by Watson-Singleton (2017) found that decreased perceived social support was associated with higher SBW schema identification, further highlighting the relevance of support from others in the internalization of SBW schema.

In addition to the overall expectation of multiple roles that Black women often face, a study by Ghavami and Peplau (2012), revealed that they likely face a unique set of stereotypes that influence their behaviors and interactions. When assessing the

stereotypes that each group faces, Ghavami and Peplau (2012) found that Black women had the highest number of unique stereotypes compared to all other groups being labeled as, confident, loud, unfeminine, sexual, and overweight which can be compared to White women who had just two unique labels (ditsy and sexually liberal). Furthermore, other studies have indicated that Black women are frequently described by more negative characteristics such as hostile, aggressive, straightforward, and strong, while other races of women are perceived as having more positive characteristics such as attractive, intelligent, and sociable (Landrine, 1985; Niemann, et al., 1994; Weitz & Gordon, 1993). Additionally, a study assessing White Americans views of Black and White women's traits found that Black women and White women were viewed as sharing traits like talkative, emotional, and family-centered (Donovan, 2020). However, Black women were also viewed as being more tough, loud, religious, and less sensitive than White women (Donovan, 2020). These negative views indicated that traits shared with White women may not have the same positive connotations for Black women.

Negative stereotypes not only impact how people view Black women, but they can also influence self-esteem and behaviors of Black women. A study by Jerald, et al., (2017) assessing the influence of Black women's awareness of group stereotypes on their mental health and wellbeing indicated that awareness of group stereotypes was predictive of negative mental health, less engagement in self-care, and increased drug and alcohol usage. As such, consistent exposure and interaction with these stereotypes may influence how Black women see themselves and interact with others. The strength stereotype is one such stereotype that a number of Black women may have internalized and often view as integral to their lives, with it often being reinforced externally (Anyiwo, et al., 2018;

Settles, et al., 2008; Stanton, et al., 2017). A focus-group study by Settles, et al., (2008) investigating differences in perception of womanhood among Black women and White women, revealed that there were common themes including gender-benefits, caretaking, family and work. Interestingly however, among Black women but not White women, inner strength was cited as an integral part of womanhood highlighting the internalization and uniqueness of the strength expectation.

The current relevance of SBW schema in culture, its prominence, and its effects are discussed and written about across several media platforms. Using magazine articles and blogs posts, Black and Peacock (2011) assessed how much of Black women's daily life and duties were indicative of SBW schema characteristics and the potential health implications of those connections. They found that women that engaged in SBW schema, behaviors were often praised, but the behaviors (e.g., endlessly giving of time, delaying self-care) were also expected. Additionally, SBW schema characteristics were indicative of the difficulties in romantic relationships, poor mental health, and perpetuated the idea that "if you can't save yourself, you weren't meant to be saved".

Many Black women view SBW schema as empowering and beneficial, as it has been linked to high self-esteem, caring for family, high achievement, and self-efficacy. However, SBW schema is evidenced to interfere with Black women's ability to live a healthy and fulfilling life (Black and Woods-Giscombe, 2012; Speight, Isom, & Thomas, 2012). Donovan and West (2015) investigated the role of SBW schema in Black women's mental health through interviews and found SBW schema to be related to higher rates of anxiety, depression, and binge eating. Similarly, interviews of Black women and how they viewed the impact of SBW schema in their lives revealed that it is

indicative of poor interpersonal relationships, coping behaviors, and self-care, with many women eventually realizing the high costs of the schema as they age (Woods-Giscombé, 2010). Another study by Black and Woods-Giscombe (2012), investigated the role of SBW schema in Black women's engagement in preventative breast cancer screenings when they had a family history of breast cancer. They found that the women cited the preventative care appointment as a lower priority than other things (e.g., work, caretaking roles), and that they would often ignore symptoms until they were debilitating.

In addition to a lack of engagement in preventative healthcare, a review by Lackey (2017) of SBW schema literature indicated that high levels of SBW schema endorsement is related to increased hesitancy to use mental health resources despite the relation between SBW schema and depression and anxiety. Ironically, interviews of Black women indicated that although they often encouraged others to seek out mental health support, they did not see mental health support as an option for themselves (Nelson, et al., 2020). Similarly, Black women with higher SBW schema endorsement were more likely to engage in binge eating behaviors, with binge eating particularly high among those who had experienced trauma (Harrington, et al., 2010). SBW schema is not only linked to resistance to engage in preventative mental health behaviors but also healthy diet and physical activity behaviors, variables that play an important role in the many health disparities that Black women face throughout their lives.

Health Disparities

The previous findings of SBW schema indicate that it can have both negative and positive outcomes with the direct and indirect effects of SBW schema potentially being more detrimental than beneficial to Black women over time (Black and Woods-

Giscombe, 2012; Speight, Isom, & Thomas, 2012). SBW schema may be particularly detrimental to Black women's physical health, contributing to the many health disparities that they face. Heart disease is the number one cause of death and disability among women in the US, but Black women suffer from it at the highest rate in the U.S., with 49% of Black women over 20 years of age dealing with the disease (American Heart Association, 2021; Black Womens' Health Imperative, 2021). Black women also have a 47% greater stroke risk compared to that of White American women and are 40% more likely to die of breast cancer under the age of 50 and twice as likely over 50, despite having a lower incidence rate. (American Cancer Society, 2019; American Cancer Society, 2022; Jiménez, et al.,2019). Further still, Black women are twice as likely to be diagnosed with stomach cancer compared to White American women, and 2.2 times more likely to die from it (CDC, 2019). Black women also have the highest rates of obesity in the U.S. (Hales, et al., 2020; Robinson, et al., 2009). While Black Americans are 1.3 times more likely to be obese or overweight compared to White Americans, gender differences within the racial group highlight an even starker difference with 56% of Black women 20 and older compared to 38% of Black men in that age group being overweight or obese (CDC, 2018).

For many racial groups, more education and higher incomes lead to better health outcomes. However, for Black women that is not always the case (Begley, 2011; Clark, et al., 2006; Signorello, 2014). When evaluating racial and gender differences in the relationship between health outcomes and socio-economic status (SES), Black women are often found to have an inverse relationship with increased SES leading to higher obesity and heart disease rates (Barrington, et al., 2020; Ogden, 2009; Ogden, et al.,

2017). Furthermore, a study by Curry (2020) indicated that educational attainment did not reduce Black womens' obesity risks, or stress responses. Similarly, Black women with a higher education have higher maternal mortality rates compared to Black women with a high school degree (CDC, 2009; Peterson, et al., 2019).

Genetics

Genetics are an influential factor in health outcomes and one way they may influence Black women's health outcomes is the relationship between genes and salt-sensitivity (Kardia, et al., 2003). A number of studies have indicated that a portion of the population has a salt-sensitive gene that makes them responsive to lower levels of salt consumption compared to those with higher salt sensitivity (see Beeks, et al., 2004 for review). The genetic predisposition to salt sensitivity may be a key factor in high rates of hypertension development among certain groups (Sanada, 2011).

In addition to being triggered by salt, some research suggests that stress can evoke a salt-sensitive response within the salt sensitive genes and that genetics can influence stress response (Stewart, et al., 2016; Terenina, 2019). A study by Ryan (2016), indicated that previous traumatic experiences can lower an individual's baseline level of stress response making their bodies more reactive to stressful situations at a cellular level. Furthermore, dealing with chronic stress can affect the genetic code leading the individual to pass on their affected genes to the next generation (Flati, 2020; Powell, 2013). The impact of gene changes due to trauma is particularly relevant when considering the history of trauma that Black women have faced (Blasingame, 2012; Halloran, 2018; Hill, 2020). The generations spent in slavery and the subsequent Jim Crow era that followed have likely impacted Black women at a genetic level contributing

in some ways to the poor health outcomes that they experience today (DeGruy, 2005, Krieger, et al., 2014).

Moreover, even when Black women follow the same diet and exercise plan as White women, DeLany, et al., (2014) found that Black women lost less weight. Similarly, when examining differences in the resting metabolic rate (RMR) between Black women and White women Sharp, et al., (2002) found that White women had a 5% higher RMR compared to Black women. These findings indicate that genetics play an important role in Black women's health, however genes are not the only predictor of health outcomes with external stressors influencing Black women's health and health behavior engagement (Kwate, et al., 2003).

Stress

Black women deal with a number of unique stressors each day due to the complexities and disadvantages of being both Black and a woman (Everett, et al., 2010; Rosenthal, & Lobel, 2011) including misogyny, racism, and misogynoir often all at once (Bailey & Trudy, 2018; Geronimus, et al., 2010; Noble & Palmer, 2022). As these stressors cannot be avoided and are often part of everyday life for this group, Black women tend to deal with sustained or chronic stress (American Psychological Association, 2011). Chronic stress can negatively impact health and can lead to problems like weight gain, anxiety, and heart disease (American Psychological Association, 2018). Research has also indicated that the chronic stressors Black women face can lead to deterioration of health due to consistent contact with high-stress situations, often known as "weathering" (for review see Forde, 2019), the speeding up of cells' aging, making Black women more susceptible to diseases and an accelerated internal aging process

(Geronimus, 1992). Weathering has been shown to affect both Black men and Black women, but it affects Black women at a younger age and a higher rate compared to Black men, indicating the detrimental effect of unique stressors (Geronimus et al., 2006). Black women's low engagement in positive health behaviors, cultural pressures and unique stressors emphasizes the importance of Black women being provided with support at all levels to improve their health and health behaviors. In addition to the effects of genetics and stressors that are outside of Black womens' control, health behavior engagement (e.g., physical activity, healthy diet) can help in the prevention or mitigation of the effects of chronic diseases like heart disease, diabetes, and obesity (Center for Disease Control and Prevention, 2021).

Health Behaviors

According to the U.S. Department of Health and Human Services (2018), adults should engage in at least 150 to 300 minutes of moderate-intensity or 75 minutes of vigorous-intensity physical activity per week. Unfortunately, many Americans do not meet the recommendations, with just 23% of Americans meeting the guidelines (Blackwell & Clarke, 2018). The engagement is even lower among Black women with only 8.4% of Black women meet the recommended amount of exercise per day compared to 23% of White women (Eyler, et al., 2003; Moore, et al., 2012). Although, a similarly low proportion of Black (29.1%) and White (29.8%) women consume the recommended amount of fruits and vegetables (Blanck, 2008; Florida Department of Health, 2007; Gans, et al., 2009; Lee, et al., 2022), Black women consume more high-fat foods and more sugar than Whites, despite the U.S. already having high sugar consumption rates (77 grams per day; Johnson, et al., 2009; Li, et al., 2017). There are a number of factors

that can influence participation in health behaviors at both the individual and group levels. Within the Black American community, expectations of weight and health behavior are often complex for Black women, and it is important to consider the many variables that can influence their health behavior decisions.

Socio-ecological Model

The Socio-ecological Model (SEM) posits that the societal, community, relationship, and individual levels can affect health behaviors and choices (Kilanowski, 2017). These factors include public policy and inequalities such as racism or sexism, that are often out of the individual's control at the societal level. For Black women, the impact of societal level factors can look like low pay and high maternal mortality rates. At the community level there are factors like access to health facilities and home-buying discrimination. Among Black women specifically, community expectations may reinforce SBW schema identification. Additionally, things like weathering and collective stress from environment are also influential at this level. At the relationship level, there are factors like family environment and support as well as friends' behaviors and expectations. At this level Black women often have SBW schema behaviors modeled for them by the women in their life, starting at a young age. Similarly, as they move into adulthood, engagement in those behaviors is reinforced by their friends and family members. Lastly, at the individual level, Black women may hold beliefs, and attitudes, that may lead them to engage in behaviors that are harmful to themselves (Bronfenbrenner, 1989). Black women strongly believe in the necessity of strength in themselves in order to survive, and those behaviors are reinforced by the praise they receive for taking on the burdens of others.

Previous research has indicated that the relationship level motivates health behaviors, with social support being particularly impactful in positive health behavior engagement (Luo, 2020). Social support is defined as the size, quality, and reliability of a network of people who provide support. However, for Black women, giving and receiving social support tends to be more complex than it is for other groups. Overall, social support has been linked to better mental health and more physical activity engagement among all groups, including Black women, particularly those who are married (Bronder, et al., 2014; Brown, et al., 2000; Brown, et al., 2020; Mason, & Lewis, 2017; Miller, et al., 2004; Warren, 1997; Tang, et al., 2008; Sharma, et al., 2005). However, there is evidence that social support may negatively impact Black women's motivation to engage in positive health behaviors, with some research showing that social support has no effect on Black women's physical activity engagement while it improves others (Martin, 2018). Additionally, a study by Settles, et al., (2008) found that Black women saw friendships as supportive but were less likely to speak of the benefits of friendships (e.g., social support) compared to White women. Similarly, a study by Florez et al. (2018), revealed that when Black women are more socially isolated, they tend to engage in more leisure-time physical activity, while the opposite was found for Black men. These studies highlight that social support for Black women may be more complicated than it is for other groups.

One potential explanation for the complicated relationship Black women have with social support is the potential for additional stress. A study by Woods-Giscombé et al., (2015) investigating the influence of family and friends' stress on the stress levels of Black women, found that Black women find others' stress to be just as stressful as their

direct stress. Additionally, receiving social support may mean that Black women deal with high expectations of returned support and obligations from friends and family members (Gray & Keith, 2003). When considering the socio-ecological model, and the complex relationship Black women have with social support, it is vital to consider the role of culture in the expectations of Black women, particularly within the Black American community.

Culture

Cultural expectations may explain some of the variance in Black women's low engagement in positive health behaviors (Ard, et al., 2014). Compared to larger societal expectations of thinness, there is a cultural tolerance within the Black American community, and even preference, for Black women to be at a higher weight (Wolfe, 2000). Black women are often lauded for being "thick" or overweight, with some Black women stating that they are only perceived as attractive at a higher weight or “curvy” (Hughes, 2021). The cultural preference for higher weight has provided Black women with what some consider a "cultural buffer", leading many to have higher self-esteem and weight satisfaction compared to White women (Carter-Edwards, 2010; Chithambo & Huey, 2013; Frisby, 2004; Poran, 2002; Sanderson et al., 2013). However, the positive "cultural buffer," may be hiding some potentially negative effects. Many Black women and girls go to great lengths to obtain the desired "thick" figure, including life-threatening surgeries, consuming medications like Apetamin (a weight gain promotion drug), and overeating (Goedluck, 2021; Mofid, 2017; National Public Radio, 2021; Onibada & Dahir, 2021; Peters, 2021). It is also important to note that on recent years there has been a shift into even more unrealistic expectations for women’s bodies, with women expected

to be both thin and muscular (Bozsik, et al., 2018). Additionally, work by Treadmill (2022) where participants used 3-D modeling to create a person with their ideal body type for a mate found that the ideal body type for women is to be 5'5, 128 lbs., with a 36-inch chest, 26-inch waist, and 36-inch hips. The current ideal body shape highlights the impossible standards that women face and what may be influencing the rapid increase of Brazilin Butt Lifts (The Aesthetic Society, 2021).

SBW schema may also play a role in weight with some Black women feeling as though they need to lean into the concept of being "strong" by being physically larger than women of other racial groups (Beaubouef-Lafontant, 2003). Being physically large may give Black women a protective feeling of "strength" that empowers them as they continue to engage in SBW schema behaviors (Kumanyika, et al., 1993). Furthermore, SBW schema provides the framework that Black women be self-sacrificing in all aspects including their health preventing Black women from confronting the realities of their behaviors. Unfortunately, Black women deal with the poor health costs of gaining "strength" through size and meeting the cultural desires for body shape and weight. Even when faced with the consequences of poor health behaviors, Black women are expected to push through and persevere, delaying their self-care for the needs of others and continuing the SBW schema narrative.

Perseverance

Despite the numerous stressors that they face, Black women continue to be high-achieving (Alfonseca, 2022; Catalyst, 2022). While Black women frequently lack access to capital and investors, 17% of Black women are in the process of starting their own businesses compared to just 15% of White men and 10% of White women (American

Express, 2019; United States Census Bureau, 2021). These numbers continue to increase despite Black women being twice as likely to be turned down for small business loans and having 22% more student loan debt compared to other White women (The American Association University of Women, 2021; The Federal Reserve System, 2017). In recent years, Black women have become a highly educated group in the U.S. accounting for 66% of bachelor's degrees, 71% of master's degrees, and 65% of doctoral degrees (National Center for Education Statistics, 2020).

Black women's drive to succeed despite their circumstances, particularly in the academic and professional sectors, is an underlying theme that can be found in Black women's words and experiences (Nuru-Jeter,2009; Thomas, 2008). A study by Woods-Giscombe (2010) using focus group interviews revealed that Black women, particularly those in college or who were college educated, expressed the desire to "be the best" and overcome obstacles at all costs. Many of these women also stated that they dealt with high expectations from their friends and family members despite limited support and resources from them (Haynes, 2000). Evidence of these high expectations to push past all obstacles can be found in culture as well (Brown & Halliday, 2018; Rogers, 2021; Wilson, 2016). There are themes of "Black Girl Magic", "trust Black women", and "Elect Black women" that have become popular in media in recent years. While positive at first glance, they insinuate that Black women have the capability to endlessly help others and push through all circumstances without receiving the support of others (Chavers, 2016; Patton, 2020; Porter, 2021), perpetuating an unattainable expectation of Black women and girls (Aboderin, 2019; Kelly, 2021; Ladson-Billings, 2017; McPherson, 2020). As such, Black women receive familial and cultural pressure to succeed alone and internalize

the expectation that they must be high-achieving and have no choice but to overcome innumerable obstacles. These cultural expectations are part of a larger system of influential factors grounded in the Socio-Ecological Model that can impact Black women's health behaviors.

Grit

The characteristics of grit are similar to those of the SBW schema (e.g., persistence, resilience; Beaubouef-Lafontant, 2003; Duckworth, et al., 2007). However, grit, defined as a trait-level perseverance and passion for long term goals, has distinct characteristics and related outcomes that distinguish it from SBW schema (Duckworth, et al., 2007). One difference is the emphasis on reaching a goal or being high-achieving, which is related to, but is not the primary focus of SBW schema that goes far beyond the achievement of individual goals. While SBW schema is associated with high achievement and goal orientation, the underlying drive for achievement and perseverance despite obstacles is a feeling of a lack of other options (Watson, et al., 2016; Woods-Giscombe, 2010). Interviews by Watson, et al., (2016) indicated that Black women reported feeling obligated to continue striving because the issues they faced were not moveable.

Another difference between SBW schema and grit is the theme of caregiving and community involvement in SBW schema that is absent within grit (Duckworth, et al., 2007; Woods-Giscombe, 2010). In much of the foundational literature on SBW schema, caregiving and supporting others is often cited as an important aspect of SBW schema (Abrams, et al., 2019; Watson, et al., 2016; Woods-Giscombe, 2010). As such, interwoven in the definition and behaviors associated with SBW schema is the

consideration and support of others, while it is not a component of grit which primarily focuses on the individual. Furthermore, previous research indicates that while grit is often a deliberate practice that must be intentionally taught through the encouragement of behaviors (e.g., praise), SBW schema is perpetuated through modeling, encouraged behaviors from mother-like figures, and through representation in the media (Anyiwo, et al., 2018; Oshin, 2019).

Furthermore, while SBW schema is tied to poor self-regulation and negative health outcomes, grit is indicative of positive self-regulation and more engagement in exercise behaviors (Reed, 2014; Woods-Giscombe´, 2010). Similarly, much of the literature on grit indicates that it leads to positive mental health outcomes with grit predicting lower levels of anxiety and depression (Coleman, 2020; Costello, et al., 2022; Musumari, et al., 2018). Work by Kannanara, et al., (2018) also indicated that grit is related to higher levels of self-control, resilience, mental well-being, and a growth-oriented mindset. Alternatively, SBW schema is primarily associated with negative outcomes for the individual, including higher levels of depression, anxiety, and binge eating behaviors (Abrams, et al., 2019; Donovan, et al., 2015; Harrington, et al., 2010). A review by Thomas, et al., (2022) showed that SBW schema encourages only one positive outcome – perseverance, and it often comes at the cost of Black women's mental and physical health. As evidenced by the literature, SBW schema and grit have attributes and outcomes that can look similar at first, however, SBW schema goes beyond goals and perseverance and includes community and interpersonal factors that are absent in grit (Thomas, et al., 2022). As such, SBW schema can be viewed as a coping mechanism used to persevere despite facing endless obstacles (Everett, et al., 2010).

Coping

There are two broad types of coping mechanisms commonly discussed in coping literature including; emotion-focused and problem-focused (Baker & Barenbaum, 2003; Carver, et al., 1989;Pearlin & Schooler, 1978). Emotion focused coping deals with addressing the emotions a person is dealing with and either processing them or shifting them. Alternatively, problem-focused coping is centered around addressing the problem and finding a solution to it (Folkman & Moskowitz, 2004). Employing the different types of coping mechanisms is situation dependent, with gender and race also contributing to the coping mechanism selected (Chapman & Mullis, 1999; Endler &Parker, 1990; Matud, 2004). In a study by Everett, et al., (2010), researchers interviewed Black women to assess the coping mechanisms they employ to deal with both acute and chronic stressors and found that many reported using work to cope with stressors like family or financial responsibilities. They also found that even interactions that should be stress-relieving (e.g., spending time with family, dinner with friends), were often stress inducing. Participants also reported engaging in behaviors like letting go, limiting overtaxing responsibilities, addressing the stress directly, and controlling their reactions. Controlling their reactions was particularly common among the participants and is a form of emotion focused coping alternatively known as suppression. Another study by Greer (2007), investigating the coping mechanisms of Black students using the Coping with Problems and Experiences Inventory, found that suppression was a form of coping often employed to deal with stressors.

Suppression and Emotion Regulation

Suppression, when an individual inhibits their emotional expression, can be related to negative outcomes (Gross, 1998). There is some evidence that chronic inhibition of anger or frustration can lead to somatic symptoms (e.g., hypertension, heart disease; Friedman & Booth-Kewley, 1987; Manuck & Kratz, 1986; T.W. Smith, 1992; Steptoe, 1993). A study by Gross (1998) investigated the impact of emotion suppression by having participants watch a "disturbing" video and attempt to either suppress their reaction, detach from the video, or act as they wanted while their blood pressure and breathing were monitored. They found that individuals in both the suppression and detachment groups showed no emotion visually, but those in the suppression group had increased blood pressure and breathing reaction while those in the detach and control groups had little change.

In addition to causing a symptomatic reaction, there is evidence that suppression can negatively affect memory (see Gross (2002) for review). Across three studies where participants expressive suppression was manipulated or examined, Richards & Gross (2000) found that suppression led a decrease in memory for information in a video, on a slide, and from conversations. Evidencing that suppression not only negatively affects physical health, but can also impact mental capacity, further emphasizing its negative effects.

Interestingly, there is evidence that there are also racial differences in the effects of emotional suppression as evidence by Roberts, et al., (2008). When using the same methodology as employed by Gross (1998), where participants viewed a "disturbing" stimulus and attempted to either suppress, detach from, or do nothing with their emotions,

they found that at baseline Black Americans had higher blood pressure and sympathetic activation compared to White Americans, and post-intervention, that those in the suppression condition had even higher blood pressure and sympathetic activation compared to White participants. These results indicate that engaging in suppression can raise Black Americans already high blood pressure levels. Unfortunately, there is evidence that Black women may often employ suppression to deal with the complex stressors they face.

While Black women may not state suppression specifically as their response to dealing with the issues they face, much of the literature on Black women's response to stressors indicate that suppression is frequently used (Lewis, et al., 2013; Watson & Hunter, 2015). An evaluation of the of the tactics that Black women employed when dealing with depression was carried out by Schreiber, et al., (2000). Using interviews, they found that Black women often stated being "strong" and "suffering in private" as ways to manage their depression symptoms. Similarly, Hurst and Beesly (2012) found that among Black college women self-silencing was employed when dealing with perceived stress which often led to psychological distress. Furthermore, Abrams, et al., (2019) found that self-silencing significantly mediated the relationship between manifesting strength and depressive symptoms. These studies highlight the common usage of "strength" among Black women, and its connection to the suppression they frequently employ when faced with the unique set of stressors they endure.

Indigenous Women

One other group that may also be impacted by a strength narrative, are Indigenous women. Both Black women and Indigenous women have similarly poor health outcomes

and low engagement in positive health behaviors (Hill et al., 2023; Huyser, et. al., 2020; Trost et al., 2022). Both Black and Indigenous women have high rates of maternal mortality with rates that are comparable to that of a third world country (Heck et al., 2021; Joseph et al., 2021). Additionally, both groups deal with a number of preventable chronic diseases including obesity, diabetes, and heart disease (Center for Disease Control and Prevention (CDC), 2022a; CDC, 2022b; Javed et al., 2022; Story, 1999).

Both Indigenous and Black American women have faced a combination of issues including enslavement, forced family separation, forced relocation, and targeted massacres throughout the history of the U.S. Even today both Black and Indigenous American women continue to face similar systemic issues with both groups have the largest pay disparities, and the highest missing and murdered rates (Crossland, et al., 2013; Time's Up Foundation, 2021; Violence Policy Center, 2022). As such it there is the potential for Indigenous women to also experience a requirement of strength that may be impacting their health outcomes. Similar to Black women, Indigenous women are more likely to be the sole or primary breadwinner for their families while simultaneously being held responsible for household duties (McKinley, et al., 2021). Additionally, both groups make up the majority of postsecondary education within their racial group despite facing a number of barriers indicating a commitment to achievement despite obstacles (National Center for Education Statistics, 2008).

As Indigenous women also have a complicated history in the U.S. and tend to face health outcomes and systemic barriers similar to that of Black women, they may also hold multiple roles, potentially leading to high expectations of strength. However, there is

currently limited research exploring a strength narrative among the Indigenous women, and how that narrative may relate to Indigenous women's health and health outcomes.

CHAPTER II - CURRENT STUDIES

Despite many foundational interview studies, there are still many avenues in need of research, including further establishing SBW schema characteristics as being experienced specifically by Black women. While previous SBW schema research has provided crucial foundational information through interviews and other qualitative methodologies, the phenomenon has yet to be evaluated in comparison to women of other races. Previous literature indicates that Black women relate to the idea of needing inner strength, but it has yet to be evaluated among other races of women. In order to reaffirm the experiences of Black women and further validate the current SBW schema literature it is vital to evaluate the identification with SBW schema characteristics among varying races of women. Similarly, it is vital that a behavioral outcome is also measured to assess the impact of SBW schema real-world implications. The author is currently unaware of any SBW schema studies quantitatively assessing the influence of SBW schema on health behavior. Furthermore, only one study (Woods, 2013) has compared SBW schema identification among Black and other races of women, specifically White women. However, that study did not assess dietary and physical activity outcomes, which is vital when considering the gap in Black women's engagement in positive health behaviors compared to that of White women. Additionally, no studies have assessed SBW schema identification between Black women and other minority women such as Indigenous American women. Considering the many similarities in their history of systemic racism, current health outcomes and modern stressors, assessing the SBW schema among Indigenous women may provide important insight about the schema and strength narratives within the group. Furthermore, there is also a dearth of research on the

malleability of SBW schema. Considering the many negative health outcomes, assessing the ability to manipulate SBW schema is of potential importance to future interventions.

This project worked to close the gap in the literature by investigating differences in SBW schema identification among Black women compared to White and Indigenous American women, its influence on diet and physical activity, and the potential manipulation of the SBW schema among Black women. Throughout history Black women and their experience have been neglected leading to a lack of understanding of their experiences and the many factors that affect them. As such, there are many opportunities to expand the literature regarding Black women and their lived experiences, assessing every possible avenue and solution. SBW schemas are just one area that may be enlightening regarding the factors that influence Black women's lives and behaviors. SBW schema has previously been established through interviews where Black women shared their lived experiences (Jones & Shorter-Gooden, 2003; Woods-Giscombé, 2010).

The experience of strength and its complex impact has been well documented in SBW schema qualitative research (Jones & Shorter-Gooden 2009; Peacock, 2011; Woods-Giscombé, 2010). Further supporting the interviewed women's' lived experiences are a limited number of quantitative studies assessing the role of SBW schema in Black women's lives, largely as it pertains to mental health. However, there is currently a lack of quantitative research examining the relationship between SBW schema and other characteristics (perseverance, physical activity, diet) despite their frequent appearance in previous interview literature. As such, the purpose of these two studies was to 1) determine if there are racial differences in SBW schema endorsement among Black, White, and Indigenous women, 2) determine if SBW schema endorsement leads to

differences in health behavior engagement, and 3) assess whether SBW schema identification can be manipulated among Black women. Both studies were approved by the University of Southern Mississippi IRB (Appendix C).

CHAPTER III – STUDY 1

Method

Participants

Participants were recruited from the online database *Prolific*. A g*power analysis indicated that $N = 171$ participants ($N = 57$ per condition) were needed to detect a medium effect size of 0.5 at 0.95 power, $\alpha = 0.05$, using a moderated multiple regression analysis and an ANOVA. A total of $N = 213$ participants responded to the survey. Of those, 20 participants did not complete the survey, and one participant reported being male. Therefore, 21 participants were removed from the dataset resulting in a final sample of $N = 192$. There were $N = 67$ (35.2%) Black Americans, $N = 69$ (35.8%) White Americans, and $N = 56$ (29%) Indigenous American participants. Participants were 18 years or older, English speaking, and identified as female and a woman. Participants were between the ages of 18 and 84, with the majority being 44 or younger ($N = 147$; 76.6%). Most participants were never married ($N = 114$; 59.4%) and had a household income of $69,999 or less ($N = 144$; 75.8%). Based on Prolific calculations and available funds, participants received $13.73 an hour for their participation in the study.

Materials

The Strong Black Woman Archetype Scale (SBWAS). A modified version of the Strong Black Woman Archetype Scale was used to assess the levels of Strong Black Woman schema among the participants. The scale assesses participant identification with narratives of strength for themselves and women of their race. The scale has three subscales (mask of strength, caretaking/self-sacrifice, self-reliance/strength) and has been previously validated with a Cronbach's a ranging from 0.77 to 0.92 (Wood, 2013). The

original scale was comprised of 40 questions. For the purposes of better understanding racial differences in the schema, six questions were added (two questions per subscale). The added questions assessed perceptions of the strength narrative for women of the participant's race. The means for the original scale (M = 3.57) and the scale with the added items (M = 3.57) were the same and the scale with the added items was used to assess SBW schema identification among participants. While there are multiple SBW schema scales available, the SBWAS is the most thorough and fully dedicated to assessing the Strong Black Woman schema, whereas with other measurements, SBW schema is often included as a subscale and is less thoroughly addressed (Appendix D).

Anagram Task

The Anagram Riddle Task assessed the length of time participants spend on a series of difficult problems. The task is conducted online and presents anagrams of easy and hard levels. The anagram task was comprised of 6 riddles of varying levels of difficulty. Participants wrote their guesses in the space provided, could take as much time as they wanted on the task, and were informed that they could move forward to the next task whenever they desired. This task aimed to assess whether SBW schema was related to persistence on a task of no importance, as SBW schema is associated with endless persistence (Woods-Giscombé, 2010; Appendix E).

Physical Activity

Self-reported physical activity was measured using the International Physical Activity Questionnaire Short Form (IPAQ-SF) that assesses participants physical activity behaviors in the past 7-days. The IPAQ-SF is a shortened (7-item) version of the International Physical Activity Questionnaire. Both the long and short forms have been

validated and are frequently used (Craig, et al., 2003). SBW schema has been associated with limited engagement in physical activity and relating SBW schema to participants current physical activity will identify potentially detrimental effects of SBW schema identification (Woods-Giscombé, 2010; Appendix F).

The Multiple Food Test

In order to assess participants' eating behaviors, the Multiple Food Test was used to assess participants' food choices. This test allowed for food choice behaviors in relation to SBW schema identification to be assessed (Woods-Giscombé, 2010). The test has been previously validated and has an internal consistency of Crohnbach's $\alpha = 0.74$. The food item rankings (unhealthy to very healthy) were based on the Nutrient Profiling Model developed in the United Kingdom. The profile is based on the combination of calorie, sugar, and nutrient content and were validated by nutritionists (Arambepola et al., 2008; Rayner et al., 2005). For the purposes of this study, the 18-trial food choice subscale was the only scale implemented because it was most relevant (Schreiber, et al., 2020; Appendix G).

Influential Factors

Influential Factors is a scale that assessed factors that may influence participant's ability to engage in positive health behaviors. The measure had 4 questions assessing the role of family, friends, and personal hygiene that may conflict with participant's ability to prioritize themselves. This measure was developed for the current study and was not previously validated (see Appendix H). Descriptives are available in Table 1.

Procedure. The study was administered using an online survey format. Upon successful completion of informed consent, participants. After opening the study,

participants completed a demographic questionnaire, the SBW schema questionnaire, the anagram task, physical activity engagement survey, food preference survey, and lastly were debriefed.

Results

Preliminary Results

Outliers. Participants were assessed for missing data and erroneous responses. All missing data were tested for randomness by comparing the percentage of missing data for each item. Missing data on variables analyzed ranged from 0.5% on the item "I have difficulty showing my emotions." to 1% on the item asking, "It is difficult for me to share problems with others." The Missing Value Analysis in SPSS was used to assess missing data for any underlying patterns, and no patterns were indicated. As the amount of missing data was limited, it was inappropriate to impute for missing values, and as such, missing items were excluded on a case-by-case basis. Scores were determined to be outliers if they were beyond +/- 3 standard deviations from the mean. Skew was assessed by dividing the skew statistic by its standard error, and there was no skew greater than 4.6. The skew analysis revealed that an outlier in the reported physical activity was present. As it was one response, no transformation was required, and the outlier was removed from the dataset. Additionally, correlations were used to assess if there were relationships between duration to complete the survey and survey responses, with no relations found. Correlations between SBW schema subscales and health behaviors are available in Table 2.

Main Analysis

Results from a one-way ANOVA used to test the hypothesis that there would be significant mean differences between Black, White, and Indigenous women on the Strong Black Woman Construct revealed a significant race difference, F (2, 189) = 9.63, $p <$ 0.001, $\eta_p^2 = 0.01$. The effect size, as measured by Cohen's d, was $d = 0.91$, indicating a large effect. Tukey's HSD post hoc analysis indicated differences between Black women ($M = 3.65$) and White women ($M = 3.37$; $p = 0.003$; 95% C.I. = [-0.48, -0.08]) and Indigenous women ($M = 3.74$) and White Women ($M = 3.37$; $p < 0.001$; 95% CI = [-0.57, - 0.16]) but no significant difference between Black women and Indigenous women ($p =$ 0.60; see Table 3).These results supported the hypothesis that Black women and Indigenous women would score higher on the SBW schema measure compared to White women (see Figure 1).

A moderated multiple regression analysis was used to test the second hypothesis, that SBW schema scores would relate to the health behaviors of Black women but not White women, and the third hypothesis, that Black women with low SBW schema scores would engage in positive and negative health behaviors at a rate similar to that of White women. Results of the regression revealed that SBW schema was not related to vigorous physical activity ($R^2 = 0.02$, F (3, 95) =1.47, $p = 0.26$), moderate physical activity ($R^2 =$ 0.02, F (3, 119) =1.47, $p = 0.23$) or time spent sitting ($R^2 = 0.02$, F (3, 160) = 0.60, $p =$ 0.62) for any group (Tables 4-6). However, SBW schema was related to time spent walking ($R^2 = 0.01$, F (3, 134) = 0.29, $p = 0.04$), but Tukey's HDS indicated no significant pairwise differences between Black women and White women ($p = 0.19$) or Indigenous women and White women ($p = 0.41$*;* see Table 7). Food choice was

significantly related to SBW schema score (R^2 = 0.01, F (3, 188) = 3.25, p = 0.02), with Black women who had higher SBW schema scores making healthier food selections compared to White women (ß = 0.26, t = 3.10, p = 0.002; see Table 8). Neither the second nor the third hypothesis was supported. The fourth hypothesis of Study 1, that race would moderate the relation between SBW schema scores and perseverance with higher SBW schema scores related to more time spent on the perseverance task for Black but not White women, was not supported (R^2 = 0.01, F (3, 183) = 0.75, p = 0.53; see Table 9).

The results of Study 1 indicated that there are racial differences between White women versus Black and Indigenous women in endorsement of the Strong Black Woman schema. Black and Indigenous women both identified closely with the Strong Black woman schema. However, SBW schema identification does not appear to be related to differences in physical activity engagement, but it does seem to be related to food choice, particularly for Black women. These results provide essential information about the role of SBW schema in health behaviors but conflict with previous research. Previous interview-based studies indicated that Black women cited SBW schema as related to their ability to engage in physical activity (Woods-Giscombe, et al., 2019). Similarly, several studies found SBW schema identification related to binge eating behaviors (Harrington, et al., 2010). These findings are unique in that they did not support those previous findings and indicated that SBW schema was related to food choice.

While SBW schema was not found to be related to different health behaviors for Black women, I would like to emphasize the findings regarding differences in SBW schema identification for Black, Indigenous, and White women. This is the first study

that the author is aware of where SBW schema identification was assessed among Indigenous women. The finding that Indigenous women had similar ratings to Black women on the SBW schema scale was not wholly surprising as Indigenous and Black women both have long histories of oppression and historical trauma in the U.S. (Braveheart-Jordan & DeBruyn L., 1995; Wilkinx, 2005). Furthermore, even today, Black and Indigenous women deal with similar issues, including poor maternal outcomes, lack of support for missing women, and disproportionate rates of incarceration compared to White Americans (Ficklin, et al., 2022; Gandbhir, et al., 2021; Petersen, et al., 2019; Daniel, 2020; Sawyer, 2020).

CHAPTER IV – STUDY 2

Method

Participants

Participants were recruited from Prolific. Using a g*power analysis, $N = 75$ participants ($N = 25$ per condition) were determined to be adequate to detect a medium effect size of 0.5 at 0.95 power, $\alpha = 0.05$, using a one-way ANOVA. A total of $N = 113$ participants completed the survey, but two participants reported being White and were removed from the sample, resulting in a final sample of $N = 111$. Participants reported that they were 18 years or older, English speaking, and identified as a Black woman and female. Participants were between the ages of 18 and 84, with the majority being 44 or younger, ($N = 79$, 71.1%). Most participants identified as single ($N = 71$, 64%) and had a household income of $69,999 or less ($N = 86$, 77.4%). Based on Prolific calculations and available funds, participants received $13.00 an hour as compensation for their participation in the study.

Materials

Written Vignette. Three written vignettes (increase, decrease, control), one in each condition, were used to manipulate the SBW schema. In the Increase SBW schema condition the Black woman were having a negative interaction with her partner and believed that it was her responsibility to resolve it and to work harder. In the Decrease SBW schema, the participants were having a positive interaction with their partner and viewed the partner as supportive in resolving the issues they face. Lastly, in the control condition, a Black woman was interacting with a coworker in a different department having a neutral conversation (Appendix I).

The Strong Black Woman Archetype Scale (SBWAS). The original Strong Black Woman Archetype Scale was used to assess the levels of Strong Black Woman among the participants. The version used for this study was originally constructed by Wood (2013) and was previously validated with a Cronbach's alpha range of 0.77 - 0.92 (Wood, 2013). The scale assesses participants identification with narratives of strength for themselves and women of their race. The scale had three subscales (mask of strength, care-taking/self-sacrifice, self-reliance/strength; see Appendix D).

Procedure

The study was administered online. Upon completion of the informed consent, participants were randomly assigned to the Strong Black Woman increase condition, the Strong Black Woman decrease condition, or the control condition. Upon opening the study, participants read instructions informing them that they would complete demographic questions, read a short vignette, complete a questionnaire, and participate in a debriefing.

In the Strong Black woman increase condition, participants first read a short vignette detailing an occasion where a Black woman was experiencing a poor evening with her partner. In this vignette the Black woman's partner was portrayed as not being considerate of her and arguing with her about where they will eat dinner. The woman's partner was rude and uncompromising about the restaurant selection. Importantly, the Black woman in the vignette had an inner monologue stating that she needs to work harder for her relationship and that it is her job to make it work.

In the Strong Black woman decrease condition, the vignette again described a conversation between a Black woman and her partner discussing a restaurant selection for

their dinner. However, she and her partner considered her preferences in the restaurant selection, with both of them being satisfied with the outcome. As with the increase vignette, the Black woman had an inner monologue. However, in this vignette her inner monologue revealed that she is happy in her relationship and the work they both put into the relationship.

Lastly, in the control condition, the vignette described a Black woman and her co-worker deciding where to eat for lunch. The co-worker worked in a different department, so the Black woman had no work responsibility associated with the co-worker. The woman and the co-worker knew each other but are not friends outside of work. In the vignette the co-workers discussed their lunch plans and shared information about upcoming presentations. In this vignette, the Black woman had an internal monologue about the neutral interaction with the co-worker. After reading the vignette, participants in each condition completed the SBW schema questionnaire, followed by a debriefing.

Results

Preliminary Results

Outliers. Participants (N = 111) were assessed for missing data and erroneous responses. All missing data were tested for randomness by comparing the percentage of missing data for each item. The Missing Values Analysis function in SPSS was used to detect any patterns among the missing values. The only question missing a response was, "What is your age?" and it was only missing one response. As this variable was irrelevant to the analyses, the participant remained in the dataset, and their missing response was unaltered. Scores were determined to be outliers if they were beyond +/- 3 standard deviations from the mean. Skew was assessed by dividing the skew statistic by standard

error, and there was no skew greater than 1.49, and as such, no transformations were required. Additionally, correlations were used to assess duration based on the time it took participants to complete the survey and survey responses, with negative correlations being found between duration and the questions "I take on more responsibilities for others than I can comfortably handle," r (110) = -0.19, (p = 0.05), "I do not let most people know the "real" me," r (110), = -0.24, (p = 0.01) and positive correlations being found with "People think that I don't have feelings," r (110) = 0.23, (p = 0.01). However, as these variables were one part of a larger measure that was essential to assess the proposed hypotheses, the data was unaltered.

Main Analysis

In order to test the hypothesis for Study 2, that Black women in the SBW schema increase condition would have the highest SBW schema scores, and those in the decrease condition would have the lowest scores, a one-way ANOVA was conducted. Results revealed that there was no significant difference in Strong Black Woman endorsement across the manipulation groups F (2, 108) = 0.69, p = 0.51, η_p^2 = 0.01. The effect size, as measured by Cohen's d, was d = 0.01, indicating a very small effect. As the primary analyses were not significant, no follow-up tests were carried out (Figure 2).

The results of Study 2 indicated that the SBW schema manipulation did not alter SBW schema levels among participants. These results are not wholly surprising as SBW schema may be so ingrained among Black women that a one-time, low-level intervention may be ineffective (Everitt & Skrondal, 2010). Importantly, there was an M = 3.5 and SD = 0.52 for participant scores, indicating a ceiling effect did not impact scores.

CHAPTER V – GENERAL DISCUSSION

These studies were designed to achieve three key objectives. The first objective was to evaluate differences in identification with SBW schema among Black, White, and Indigenous women (Study 1). The second objective was to examine evidence of racial differences in the potential relationship between SBW schema, health, and perseverance behaviors (Study 1). Lastly, the third objective was to assess the manipulability of SBW schema among Black women (Study 2). While Study 1 identified differences in SBW schema identification across races, there were few differences in how SBW schema related to health behaviors. Additionally, Study 2 revealed that the SBW schema manipulation was ineffective, with no evidence of differences between vignette groups.

The findings from Study 1 revealed significant differences in SBW schema identification across races, with Black and Indigenous women scoring higher than White women. These results are consistent with previous research which suggests that SBW schema, or a similar strength narrative, is not as perpetuated by White women as it is by Black women (Abrams, et al., 2014; Chamberlain, 2019). Chamberlain (2019) found that White women had much lower SBW schema scores than Black women. Similarly, Settles et al., (2008) reported that only Black women identified with "inner strength" as an important part of womanhood. These findings are consistent with previous research by Woods (2013), who used a different SBW schema measure to investigate score differences between the two groups while also validating their developed scale. The SBW schema measure was specifically developed based on interviews with Black women and pertained to their unique experiences in the world (Jones & Shorter-Goodman, 2003;

Woods-Giscombé, 2010). This finding supports the idea that SBW schema is a common experience among Black women.

Interestingly, Indigenous women had SBW schema scores similar to Black women. While there is no previous research investigating SBW schema or a strength narrative among Indigenous women, the results are not entirely surprising. Throughout their history, Indigenous women have faced racism and discrimination, potentially developing and perpetuating a strength ideal to deal with the challenges and obstacles they face (Burnette, 2015; Burnette &Figley, 2017; Vizenor, 2008). Since colonization, Indigenous women have experiences violence, family separation, land denial, and slavery (Valcárcel et al., 2020). Further still, Indigenous women continue to face high rates of violence, poor health outcomes, and complex family systems similar to Black women (Burnette et al., 2015; Gones, et al., 2019; Seattle Indian Health Board, 2021). Both groups of women have high rates of single motherhood with 41% of Indigenous children and 72% of Black children living in a female led single parent household (Administration for Native Americans, n.d.; United States Census Bureau, 2021). Single Black (37.4%) and Indigenous (42.6%) mothers are also more likely to live in poverty compared to single mothers of other racial groups further placing both groups at a disadvantage (Sun, 2023).

Furthermore, elderly people within the Black and Indigenous communities die at a younger age compared to other racial groups, further placing both groups of women at a disadvantage with less support potentially influencing the strength narrative. While those 55 years and older make up 29% of the population, for both the Black and Indigenous American communities those in that age group make up only 22% of the population

(United States Census Bureau, 2019). Elderly family members provide support in a number of ways including free childcare, emotional and financial support with the average grandparent contributing over $2,000 a year to their grandchild (American Association for Retired Persons (AARP), 2019; for review see Choi, et al., 2016; Huo et al., 2017). As such, Black and Indigenous women do not receive the support that women of other races do which may further influence their support of strength narratives. As such, it may be that among groups where women are expected to take on multiple roles and a heavy load, a strength narrative will form to help women cope with the obstacles they face.

The hypothesis that SBW schema would predict health behaviors for Black women was not supported. SBW schema was only found to be predictive of time spent walking, with higher SBW schema relating to more time spent walking. However, there were no differences between racial groups. This finding is surprising as previous research suggests that SBW schema can be indicative of less time to exercise and engage in other preventative self-care behaviors. It is possible that other factors such as the environment and access may be more impactful in determining differences in physical activity engagement (Ainsworth et al., 2003; Felton et al., 2009; Joseph et al., 2015; King et al., 2000). Additionally, there is limited research indicating that middle and upper socio-economic status Black women have higher SBW schema scores compared to those with lower socio-economic status, potentially indicating that access to a safe place and leisure time to way may be relevant (Witherspoon, et al., n.d.). Similarly, SBW schema may be more predictive of engaging in preventative care behaviors (e.g., going to the doctor) since it is not a regular activity and requires more time out of one's day to complete.

Study 1 also found evidence of an unexpected relationship between SBW schema and food choice for Black women. The results of the study showed that higher SBW schema was related to healthier food choices among Black women, which did not align with the predicted direction. This finding contradicts previous research that has linked SBW schema to poor eating habits among Black women. One reason for this discrepancy may be the measure used in this study, which assessed virtual food choice rather than current eating patterns. Furthermore, past research has primarily associated ABW with binge eating, and it has not been investigated in association with other eating behaviors (Goode et al., 2020; Dubowitz et al., 2008; Harrington et al., 2010; Serdula et al., 2004; Goode et al., 2020). Lastly, it can be argued that SBW schema may also serve as a protective factor leading Black women to choose healthier foods. A core aspect of SBW schema is self-reliance and therefore, Black women may want to make healthier food choices in order to ensure that they take care of themselves as they believe others will not do so.

Lastly, in Study 1 no relationship was found between SBW schema and perseverance. These results are somewhat surprising as some SBW schema research has found SBW schema to be associated with themes of perseverance (Jones & Shorter-Goodman, 2003; Woods, 2013; Woods-Giscombé, 2010). However, attempting to assess a direct relationship between SBW schema and perseverance is novel. Participants in a study conducted by Woods-Giscombé (2010) cited work-related persistence as a characteristic of SBW schema, indicating that the persistence aspect of SBW schema may be situation specific. Therefore, a different type of task may be needed to assess the relationship between SBW schema and perseverance. Furthermore, it may be that SBW

schema is relevant only to tasks viewed as essential by the individual or in proximity to helping others.

Study 2, an attempt to manipulate SBW schema, yielded no significant differences in SBW schema scores between the increase, decrease, or control groups. One possible explanation for the lack of significant findings is that SBW schema is a trait; therefore, a different type of manipulation may be more effective (Allport, 2014). Previous research has suggested that SBW schema may be a side effect of slavery and is perpetuated within the American and Black American culture (Romero, 2000; Thomas, Witherspoon, & Speight, 2004). As such, interventions aimed at manipulating SBW schema may need to be more intensive or longitudinal to be effective. A review by Roberts et al., (2017) indicated that trait change can occur, but it may require several weeks of exposure to an intervention. Therefore, repeated exposure may be necessary to see changes in Black women's SBW schema scores. Another possible explanation for the lack of significant findings is the relative newness of SBW schema research. SBW schema is a developing field, and a more effective manipulation may target a different aspect of SBW schema.

Additionally, there is the potential that the manipulation was not strong enough. In previous research, SBW schema has been acknowledged as a shared experience for Black women that is perpetuated both individually and across society at large (Watson & Hunter, 2016; Nelson, et al., 2016). In order for a manipulation to be effective, it may need to address other factors that have been shown to be related to or impacted by SBW schema, including reading about the issues that Black women face in various sectors (e.g., health, relationships, career). Considering that research indicates that SBW schema

begins to seep into Black women's lives during childhood, it is likely that SBW schema is a trait, and interventions should be developed accordingly (Oshin & Milan, 2019).

Limitations

This study has several limitations that must be considered. First, the food choice measure used in Study 1 may have limited the findings. Although, the current measure yielded significant findings, assessing SBW schema as it relates to current eating behaviors may provide better insight into the relationship between SBW schema and health behaviors. Additionally, desirability bias may have influenced the results, leading to inaccurate choices among Black women. Future studies should assess current fast food, processed food, and fruit and vegetable consumption in relation to SBW schema to better understand the relationship. Another limitation of the study was the lack of previous research on SBW schema, which made it difficult to determine effective methodologies and draw conclusions from the findings. Further, quantitative work is needed to develop more effective methodologies and better understand SBW schema.

Lastly, the manipulation employed in Study 2 was ineffective, which may be due to the emphasis on interpersonal relationships. While past research indicated that SBW schema is associated with poor romantic relationships, it may be that SBW schema leads to poor relationships, making the intervention ineffective. Furthermore, as previously mentioned, the results of the study indicate that SBW schema is more of a trait which requires a more intensive intervention. As such, future studies should explore the potential influence of other SBW schema factors when manipulating the schema or attempt to use repeated exposure to better understand SBW schema and its manipulability.

Future Research

Moving forward, there are several key areas for future research in SBW schema. One crucial direction is the development of effective interventions to address SBW schema. This may involve investigating other areas of SBW schema, such as caretaking, or displays of strength. Considering the clear evidence in support of the existence of SBW schema among both Black and Indigenous women. Taking steps to develop effective interventions may be beneficial. Additionally, developing policies that can help support these women in different aspects of their life (caregiving, financial support, etc.) may also be helpful.

Another avenue in need of further work in the exploration of the relationship between SBW schema or the strength narrative and other minority groups in the U.S. As Indigenous women were found to have the highest SBW schema scores, exploring the existence of SBW schema among other races of women may provide important insight into strength narratives for other groups. Similar to Black women, many minority women face strength and emotional stereotypes that may lead them to have SBW schema scores similar to Black and Indigenous women (Ghavami & Peplau, 2012; Lee, 2018; Tsai & Lui, 2018).

Another area of research is need of expansion is the exploration of the SBW schema among Indigenous women. Given their high scores on the SBW schema measure, investigating the strength narrative and how it impacts Indigenous women is essential. Further still, the development of a measure specific to Indigenous women's experiences, providing an opportunity to assess their unique experiences and compare them with those of other groups may also be useful. Similarly, parsing out the differences in the strength

narrative between Indigenous and Black women may provide key insights into the development and perpetuation of both SBW schema and a strength schema specific to the experiences of Indigenous women.

Further research can investigate geographical differences in SBW schema and the potential impact on behaviors. While previous studies have established a baseline for SBW schema among Black women in the U.S., no research has explored potential regional differences. Examining the role of geography may provide additional information about how the SBW schema impacts Black women's lives, especially in the Deep South, given the complex history. Additionally, exploring the similarities and differences in the experiences of Black and Indigenous American women regarding SBW schema provide information about underlying theories of SBW schema and its development.

Implications

The results of Study 1 and Study 2 hold implications for research and interventions targeting SBW schema in Black and Indigenous women. The study identified similarities in perceptions of SBW schema between these two groups, as well as the significance of the narrative of strength for Indigenous women. As such, future research should consider this narrative's importance when studying Indigenous women's mental and physical health, and in the development of interventions.

Furthermore, the results of Study 1 suggest that SBW schema may not directly correlate to health behavior engagement, however, it may be one of many variables that impact Black women's health behavior decisions. Therefore, interventions aimed at Black women's health should consider the impact of SBW schema on mental health and

health behavior engagement. Lastly, community-based interventions could also benefit by addressing how SBW schema impacts Black women within the context of their community.

This project emphasizes the significance of including SBW schema in interventions designed to address the issues Black women face. However, the study also reveals that SBW schema cannot be addressed through a single interaction, emphasizing the importance of considering this aspect in the design of future interventions. Furthermore, the findings of the study have implications for dietary research on Black women. Its suggests that the diets of Black women may be improving, or Black women have an interest in improving their diets, which should also be considered in future study designs.

Conclusion

The aim of this project was to investigate differences in identification with SBW schema among Black, White, and Indigenous women, the impact on health behavior, perseverance, manipulability, and racial differences in SBW schema ratings. Although SBW schema was not related to moderate or vigorous physical activity, it was related to walking behaviors. Interestingly, higher SBW schema was related to better food choices for Black women, but not other races. Moreover, the manipulation did not affect Black women's SBW schema scores. Importantly, racial differences were found between groups with Black and Indigenous women having higher SBW schema scores than their White counterparts. Although only one hypothesis was confirmed, the results highlight areas that require further exploration. The study reveals that Black and Indigenous women have internalized significant expectations of strength which may negatively

impact their health. Although SBW schema was not found to be directly related to physical activity or dietary behaviors in the hypothesized direction, the findings suggest that Black women's dietary behaviors may be changing and require further investigation. Importantly, the study highlights the existences of a previously undiscussed strength narrative among Indigenous women that merits further exploration. These results shed light on an under-researched area that may significantly impact the lives and well-being of Indigenous women.

APPENDIX A - TABLES

Table A1. Influential Factors Descriptives

Table 1. Influential Factors Descriptives

Influential Factors Items	Black Women (N=56) M(SD)	Indigenous Women (N=67) M(SD)	White Women (N=69) M(SD)
Talking with family and friends interferes with the time I spend working out	2.49 (1.09)	2.38 (1.24)	2.03 (1.12)
Tending to my hair influences how often I work out	2.28 (1.17)	2.32 (1.39)	1.77 (.94)
Tending to the emotions of others interferes with taking care of my own needs	3.27 (1.14)	3.59 (1.02)	3.22 (1.17)
Phone calls from family take away from my day	2.75(1.25)	2.46(1.22)	2.19(1.00)

Table A2. SBW Schema Subscales and Health Behavior Correlations

Table 2. SBW Schema Subscales and Health Behavior Correlations

Variable	n	M	SD	1	2	3	4	5	6	7	8
1.Mask of Strength	193	3.36	0.53	-							
2.Caretaking/nurturing	193	3.54	0.72	0.66**	-						
3.Self-reliance/strength	193	3.72	0.52	0.74**	0.66**	-					
4.Food Choice	193	2.58	0.48	-0.01	-0.06	0.01	-				
5.IPAQVig	100	1716.40	2227.74	0.16	0.02	0.10	0.09	-			
6.IPAQMod	124	1182.42	1749.30	-0.04	0.08	0.09	-0.08	0.52**	-		
7.IPAWalk	139	1491.77	2357.72	0.08	0.22**	0.11	0.09	0.07	0.07	-	
8.IPAQSit	165	491.64	323.65	-0.02	-0.12	-0.06	-0.01	-0.19	-0.06	-0.14	-

Table A3. One-way ANOVA with Tukey's Posthoc Comparisons

Table 3. One-way ANOVA with Tukey's Posthoc Comparisons

Item		Group Mean				Post Hoc Test (Tukeys)	
						Mean diff.	*p*
Mask of Strength		White Women	Black Women	Indigenous Women	Interaction		
I feel pressured to appear strong, even when I'm feeling weak	*F* (2, 190)=[2.18], *p* =0.06, η_p^2=0.03						
I do not let most people know the "real" me.	*F* (2, 190)=[.95], *p* =0.39, η_p^2=0.01						
I do NOT like to let others know when I am feeling vulnerable.	*F* (2, 190)=[2.50], *p* =0.09, η_p^2=0.03						
I have difficulty showing my emotions.	*F* (2, 189)=[.55], *p* =0.58, η_p^2=0.01						
I try to always maintain my composure.	*F* (2, 190)=[2.98], *p* =0.05, η_p^2=0.03						

Table A3. (Continued)

It is difficult for me to share problems with others.	*F* (2, 188)=[3.21], *p* =0.04, η_p^2=0.03	*M* [3.32(±1.11)]	*M* [3.59(±.96)]	*M* [3.79(±1.04)]			
					Black x White	-0.47	0.04
					Indigenous x White		
					Indigenous x Black		
I tell others that I am fine, even when I am depressed or down.	*F* (2, 190)=[2.21], *p* =0.11, η_p^2=0.02						
Women of my race do NOT like to let others know when they are feeling vulnerable.	*F* (2, 190)=[31.51], *p* <0.001,η_p^2=0.25	*M* [2.93(±.86)]	*M* [3.99(±.78)]	*M* [3.75(±.79)]			
					Black x White	-1.06	<0.001
					Indigenous x White	0.82	<0.001
					Indigenous x Black		

Table A3. (Continued)

It is easy for me to tell other people my problems.	*F* (2, 190)=[.50], *p* =0.61,η_p^2=0.01						
People think that I don't have feelings.	*F* (2, 190)=[7.86], *p* <0.001,η_p^2=0.08	*M* [2.12(±1.01)]	*M* [2.88(±1.26)]	*M* [2.63(±1.17)]			
					Black x White	-0.77	<0.001
					Indigenous x White	-0.51	0.04
					Indigenous x Black		
Often, I look happy enough on the outside, but inwardly I feel overwhelmed and unhappy.	*F* (2, 190)=[3.91], *p* =0.02,η_p^2=0.04	*M* [3.29(±.93)]	*M* [3.38(±.99)]	*M* [3.75(±.94)]			
					Black x White		
					Indigenous x White	-0.46	0.02
					Indigenous x Black		
I need people to see me as always confident.	*F* (2, 190)=[.90], *p* =0.41,η_p^2=0.01						

Table A3. (Continued)

Often women of my race look happy enough on the outside, but inwardly they feel overwhelmed and unhappy.	*F* (2, 190)=[7.39], *p* <0.001,η_p^2=0.07	*M* [3.26(±.74)]	*M* [3.78(±.84)]	*M* [3.48(±.79)]			
					Black x White	-0.52	<0.001
					Indigenous x White		
					Indigenous x Black		
Care-taking/ Self-Sacrifice							
I will let people down if I take time out for myself.	*F* (2, 190)=[1.44], *p* =0.24,η_p^2=0.02						
I am often expected to take care of family members.	*F* (2, 190)=[5.98], *p* =0.003,η_p^2=0.06	*M* [3.38(±1.38)]	*M* [3.56(1.26)]	*M* [4.11(±.87)]			

Table A3. (Continued)

					Black x White		
					Indigenous x White	-0.73	0.003
					Indigenous x Black	-0.55	0.03
I am always helping someone else.	*F* (2, 190)=[4.44], *p* =0.01,η_p^2=0.05	*M* [3.57(±.97)]	*M* [3.82(±.96)]	*M* [4.07(±.89)]			
					Black x White		
					Indigenous x White	-0.51	0.01
					Indigenous x Black		
I am overworked, overwhelmed, and/or underappreciated.	*F* (2, 190)=[1.03], *p* =0.36,η_p^2=0.01						
At times I feel overwhelmed with problems.	*F* (2, 190)=[.07], *p* =0.94,η_p^2=0.001						
I take on more responsibilities for others than I can comfortably handle.	*F* (2, 190)=[1.12], *p* =0.33,η_p^2=0.01						

Table A3. (Continued)

I feel guilty when I put my own needs before the needs of others.	F (2, 190)=[2.48], p =.09,η_p^2=.03						
Women of my race are often expected to take care of family members.	F (2, 190)=[39.36], p <0.001,η_p^2=0.09	M [3.64(±1.10)]	M [4.29(±.85)]	M [4.21(±1.00)]			
					Black x White	-0.66	<0.001
					Indigenous x White	-0.58	0.003
					Indigenous x Black		
I often take on other people's problems.	F (2, 190)=[2.18], p =0.06,η_p^2=0.06						
Women of my race are always helping someone else.	F (2, 190)=[29.29], p <0.001,η_p^2=0.24	M [3.32(±.65)]	M [4.26(±.75)]	M [3.93(±.81)]			
					Black x White	-0.95	<0.001
					Indigenous x White	-0.61	<0.001
					Indigenous x Black	0.34	0.03

Table A3. (Continued)

People often expect me to take care of them.	*F* (2, 190)=[3.84], *p* =0.02,η_p^2=0.04	*M* [3.03(±1.14)]	*M* [3.35(±1.16)]	*M* [3.55(±.87)]			
					Black x White		
					Indigenous x White		
					Indigenous x Black		
Self-reliance/Strength							
Women of my race expect to experience many obstacles in life.	*F* (2, 190)=[50.28], *p* <0.001,η_p^2=0.35	*M* [3.04(±.90)]	*M* [4.38(±.75)]	*M* [4.13(±.81)]			
					Black x White	-1.34	<0.001
					Indigenous x White	-1.08	<0.001
					Indigenous x Black		
I feel uncomfortable asking others for help.	*F* (2, 190)=[1.37], *p* =0.26,η_p^2=0.01						

Table A3. (Continued)

If you have a problem, you should handle it quietly and with dignity.	F (2, 190)=[.43], p =0.65,η_p^2=0.01						
I find it difficult to ask others for help.	F (2, 189)=[.54], p =0.59,η_p^2=0.01						
If I fall apart, I will be a failure.	F (2, 190)=[4.50], p =0.01,η_p^2=0.05	M [3.51(±1.184)]	M [2.93(±1.40)]	M [3.50(±1.24)]			
					Black x White	0.58	0.02
					Indigenous x White		
					Indigenous x Black	-0.57	0.04
It is important that I be/become financially independent and not expect a boy/girlfriend or husband/wife to support me financially.	F (2, 190)=.10], p =0.91,η_p^2=0.001						

Table A3. (Continued)

In order to feel good about myself, I need to feel independent and self-sufficient.	*F* (2, 190)=[.52], *p* =0.59,η_p^2=0.01						
If women of my race fall apart, they will be a failure.	*F* (2, 190)=[.75], *p* =0.48,η_p^2=0.01						
The women in my family are survivors.	*F* (2, 189)=[15.68], *p* <0.001,η_p^2=0.14	*M* [3.51(±.95)]	*M* [4.12(±.98)]	*M* [4.38(±.73)]			
					Black x White	-0.61	<0.001
					Indigenous x White	-0.87	<0.001
					Indigenous x Black		
I believe that it is best not to rely on others.	*F* (2, 190)=[2.453], *p* =0.09,η_p^2=0.03						
I am strong.	*F* (2, 189)=[2.394], *p* =0.09,η_p^2=0.03						
I cannot rely on others to meet my needs.	*F* (2, 190)=[2.958], *p* =0.05,η_p^2=0.03						

Table A3. (Continued)

I am independent.	*F* (2, 190)=[1.265], *p* =0.29,η_p^2=0.01						
It is important for me to feel strong.	*F* (2, 190)=[1.630], *p* =0.20,η_p^2=0.02						
I expect to experience many obstacles in life.	*F* (2, 190)=[4.362], *p* =0.01,η_p^2=0.04	*M* [3.67(±.83)]	*M* [3.91(±.97)]	*M* [4.13(±.76)]			
					Black x White	-0.46	0.01
					Indigenous x White		
					Indigenous x Black		
Women of my race are stronger than women of other races.	*F* (2, 190)=[39.36], *p* <0.001,η_p^2=0.29	*M* [2.20(±1.04)]	*M* [3.76(±1.11)]	*M* [3.20(±.96)]			
					Black x White	-1.56	<0.001
					Indigenous x White	-0.99	<0.001
					Indigenous x Black	0.57	0.01

Table A3. (Continued)

Women of my race have to be strong to survive.	*F* (2, 190)=[57.28], *p* <0.001,η_p^2=0.38	*M* [3.12(±.814)]	*M* [4.43(±.82)]	*M* [4.36(±.75)]			
					Black x White	-1.31	<0.001
					Indigenous x White	-1.24	<0.001
					Indigenous x Black		

Table A4. Regression of Self-Reported Vigorous Physical Activity onto SBW Schema Level

Table 4. Regression of Self-Reported Vigorous Physical Activity onto SBW Schema Level

	Predictor Variables	B	SE	ß	*t*	*p*
Step 1	Strong Black Woman Schema Score	284.55	456.19	0.07	0.62	0.53
	Black Americans	736.21	565.44	0.16	1.30	0.20
	Indigenous women	947.41	591.09	0.20	1.60	0.11
$\Delta R^2 = 0.04$, F (3, 95) =1.37, $p = 0.26$; Model $R^2 = 0.04$, F (3,95) =1.37, $p = 0.26$						
Step 2	Strong Black Woman Schema Score	-74.75	575.83	-0.02	-0.13	0.90
	Black Americans	1582.42	4029.20	0.35	0.39	0.70
	Indigenous Women	-3069.00	4259.13	-0.66	-0.72	0.47
	Black x SBW Score	-207.99	1151.59	-0.17	-0.18	0.86
	Indigenous x SBW Score	1111.46	1203.74	0.90	0.92	0.35
$\Delta R^2 = 0.02$, F (2, 93) = 0.83, $p = 0.84$; Model $R^2 = 0.07$, F (5, 93) = 1.15, $p = 0.34$						

Table A5. Regression of Self-Reported Moderate Physical Activity onto SBW Schema Level

Table 5. Regression of Self-Reported Moderate Physical Activity onto SBW Schema Level

	Predictor Variables	B	SE	ß	*t*	*p*
Step 1	Strong Black Woman Schema Score	142.24	324.11	0.04	0.44	0.66
	Black Americans	-365.32	386.52	-0.10	-0.95	0.35
	Indigenous women	418.03	411.09	0.11	1.02	0.31
$\Delta R^2 = 0.04$, F (3, 119) = 1.47, $p = 0.23$; Model $R^2 = 0.04$, F (3, 119) = 1.47, $p = 0.23$						
Step 2	Strong Black Woman Schema Score	-74.75	575.83	-0.02	-0.13	0.90
	Black Americans	-1411.35	2768.61	-0.39	-0.51	0.61
	Indigenous women	-795.53	3021.51	-0.21	-0.26	0.79
	Black x SBW Score	301.62	779.65	0.31	0.39	0.70
	Indigenous x SBW score	343.10	834.53	0.34	0.41	0.68
$\Delta R^2 = 0.002$, F (2, 117) = 0.11, $p = 0.90$; Model $R^2 = 0.07$, F (5, 117) = 0.91, $p = 0.48$						

Table A6. Regression of Self-Reported Sitting Activity onto SBW Schema Level

Table 6. Regression of Self-Reported Sitting Activity onto SBW Schema Level

	Predictor Variables	B	SE	ß	*t*	*p*
Step 1	Strong Black Woman Schema Score	-52.97	52.27	-0.08	-1.01	0.31
	Black Americans	53.51	62.52	0.08	0.86	0.39
	Indigenous women	2.75	65.52	0.004	0.04	0.97
$\Delta R^2 = 0.01$, F (3, 160) =0.60, $p = 0.62$; Model $R^2 = 0.01$, F (3,160) = 0.60, $p = 0.62$						
Step 2	Strong Black Woman Schema Score	-167.48	87.65	-0.27	-1.91	0.06
	Black Americans	-641.64	422.10	-0.94	-1.52	0.13
	Indigenous women	-467.94	504.64	-0.66	-0.93	0.36
	Black x SBW Score	199.12	119.20	1.08	1.67	0.10
	Indigenous women x SBW Score	137.49	139.69	0.73	0.98	0.33
$\Delta R^2 = 0.02$, F (2, 158) = 1.42, $p = 0.24$; Model $R^2 = 0.02$, F (5, 158) = 0.93, $p = 0.46$						

Table A7. Regression of Self-Reported Walking Activity onto SBW Schema Level

Table 7. Regression of Self-Reported Walking Activity onto SBW Schema Level

	Predictor Variables	B	SE	ß	*t*	*p*
Step 1	Strong Black Woman Schema Score	663.44	406.76	0.14	1.63	0.11
	Black Americans	-650.93	491.04	-0.13	-1.33	0.19
	Indigenous women	423.44	508.57	0.08	0.83	0.41
$\Delta R^2 = 0.06$, F (3, 134) =2.86, $p = 0.04$; Model $R^2 = 0.06$, F (3,134) =2.86, $p = 0.04$						
Step 2	Strong Black Woman Schema Score	879.13	708.37	0.19	1.24	0.22
	Black Americans	645.32	3527.81	0.13	0.18	0.86
	Indigenous women	1368.72	3621.30	0.27	0.38	0.71
	Black x SBW Score	-373.86	1001.89	-0.27	-0.37	0.71
	Indigenous women x SBW	-273.85	1003.96	-0.21	-0.27	0.79
$\Delta R^2 = 0.03$, F (2, 132) = 0.08, $p = 0.93$; Model $R^2 = 0.03$, F (5, 132) = 1.72, $p = 0.13$						

Table A8. Regression of Food Choice onto SBW Schema Level

Table 8. Regression of Food Choice onto SBW Schema Level

	Predictor Variables	B	SE	ß	*t*	*p*
Step 1	Strong Black Woman Schema Score	-0.07	0.07	-0.07	-0.94	0.35
	Black Americans	0.26	0.08	0.26	3.10	0.002
	Indigenous women	0.12	0.08	0.12	1.37	0.17
$\Delta R^2 = 0.03$, F (3, 188) = 3.25 $p = 0.02$; Model $R^2 = 0.03$, F (3,188) =3.25, $p = 0.02$						
Step 2	Strong Black Woman Schema Score	0.07	0.12	0.06	0.47	0.64
	Black Americans	0.81	0.57	0.81	1.41	0.16
	Indigenous women	0.88	0.64	0.84	1.37	0.17
	Black x SBW	-0.16	0.16	-0.60	-0.99	0.32
	Indigenous women x SBW	-0.21	0.18	-0.78	-1.20	0.23
$\Delta R^2 = 0.03$, F (2, 186) = 0.83, $p = 0.44$; Model $R^2 = 0.03$, F (5, 186) = 2.28, $p = 0.05$						

Table A9. Regression of Time on Anagram Task onto SBW Schema Level

Table 9. Regression of Time on Anagram Task onto SBW Schema Level

	Predictor Variables	B	SE	ß	*t*	*p*
Step 1	Strong Black Woman Schema Score	6.53	19.94	0.03	0.33	0.74
	Black Americans	8.66	23.92	0.03	0.36	0.72
	Indigenous women	32.65	25.37	0.11	1.29	0.20
$\Delta R^2 = 0.01$, F (3, 183) = 0.75, $p = 0.53$; Model $R^2 = 0.01$, F (3,183) = 0.75, $p = 0.53$						
Step 2	Strong Black Woman Schema Score	34.49	34.35	0.13	1.00	0.32
	Black Americans	226.98	166.15	0.81	1.37	0.17
	Indigenous women	76.37	184.80	0.26	0.41	0.68
	Black x SBW Score	-62.05	47.01	-0.81	-1.32	0.19
	Indigenous women x SBW Score	-14.40	51.18	-0.19	-0.28	0.78
$\Delta R^2 = 0.01$, F (2, 181) = 0.96, $p = 0.39$; Model $R^2 = 0.01$, F (5, 181) = 0.83, $p = 0.53$						

APPENDIX B - FIGURES

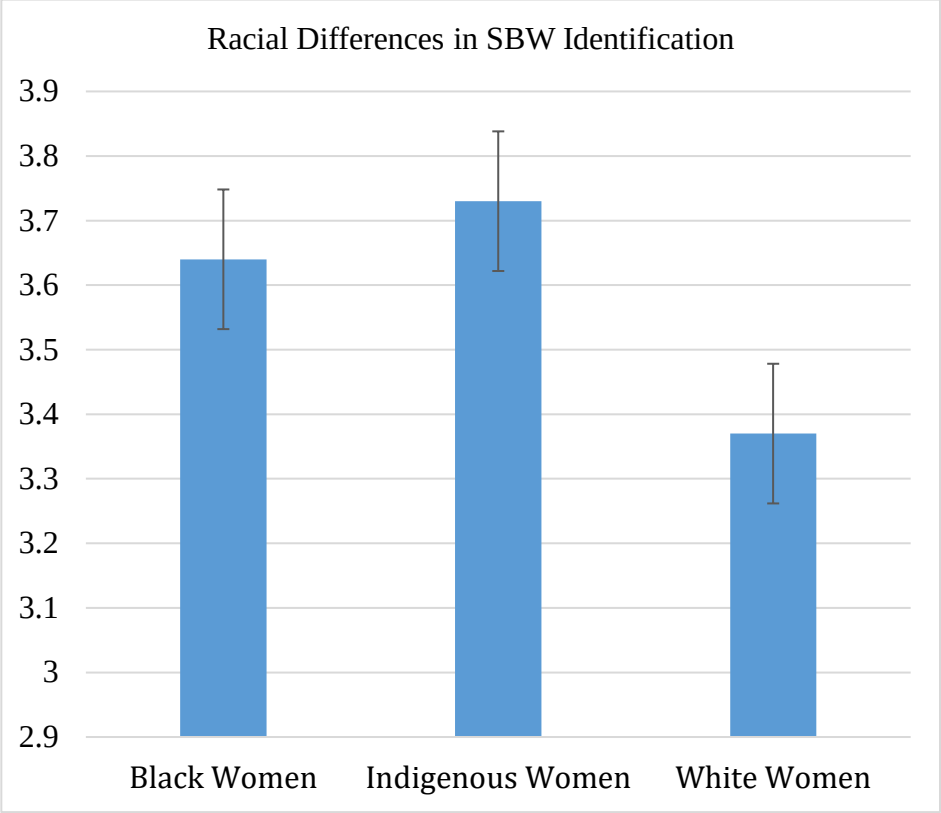

Figure A1. *Means for Racial Differences in Identification with the Strong Black Woman Schema*

Note. Error bars represent standard errors.

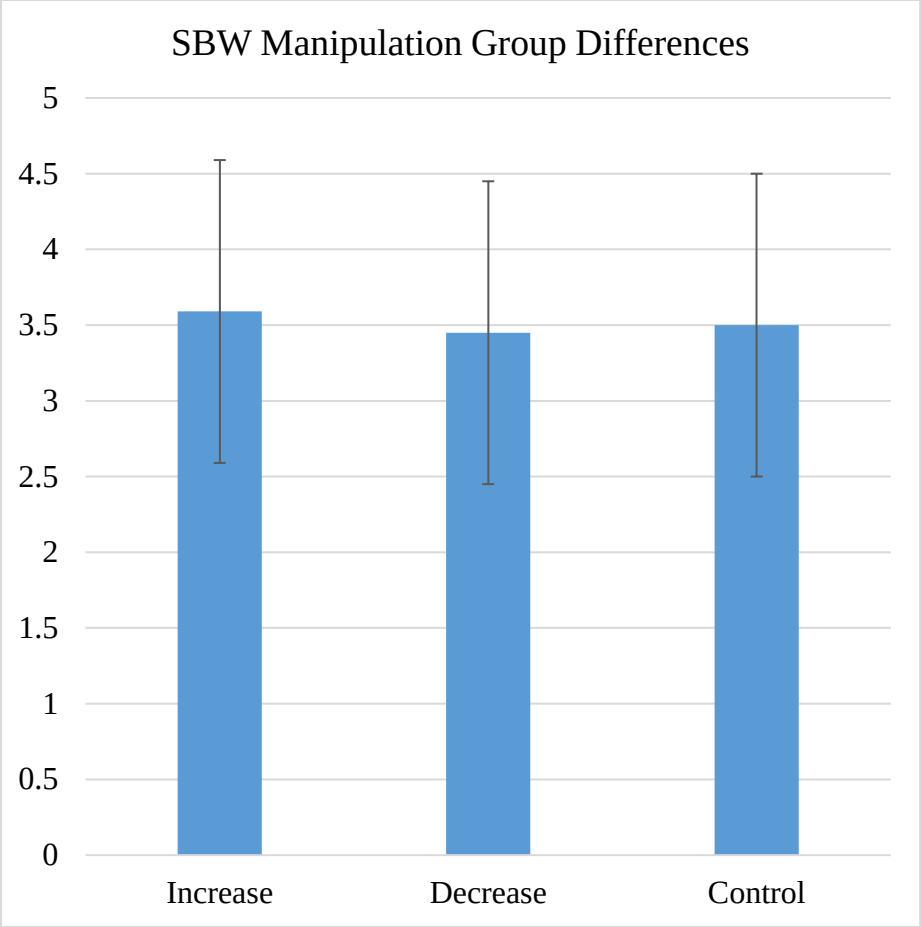

Figure A2. *Means for Group Differences in Identification with the Strong Black Woman Schema*

Note. Error bars represent standard errors.

APPENDIX C –IRB APPROVAL LETTER

Office *of*
Research Integrity

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

118 COLLEGE DRIVE #5116 • HATTIESBURG, MS | 601.266.6756 | WWW.USM.EDU/ORI

NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER:	22-1504
PROJECT TITLE:	The Relationship between Strong Black Woman Schema Identification and Health Behavior Outcomes
SCHOOL/PROGRAM	Psychology
RESEARCHERS:	PI: Raegan Bishop Investigators: Bishop, Raegan~Greer, Tammy~
IRB COMMITTEE ACTION:	Approved
CATEGORY:	Expedited Category
PERIOD OF APPROVAL:	08-Nov-2022 to 07-Nov-2023

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

APPENDIX D – STRONG BLACK WOMAN ARCHETYPE SCALE

Instructions: Please read the following items and rate how often you think that each of the following statements applies to you.

1. I feel pressured to appear strong, even when I'm feeling weak.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

2. I do not let most people know the "real" me.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

3. Women of my race have to be strong to survive.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

4. I do NOT like to let others know when I am feeling vulnerable.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

5. I will let people down if I take time out for myself.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

6. I am often expected to take care of family members.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

7. I am always helping someone else.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

8. I have difficulty showing my emotions.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

9. I try to always maintain my composure.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

10. I am overworked, overwhelmed, and/or underappreciated.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

11. It is difficult for me to share problems with others.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

12. I feel uncomfortable asking others for help.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

13. If you have a problem, you should handle it quietly and with dignity.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

14. I do not want others to know if I experience a problem.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

15. I find it difficult to ask others for help.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

16. If I fall apart, I will be a failure.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

17. I tell others that I am fine, even when I am depressed or down.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

18. It is important that I be/become financially independent and not expect a boy/girlfriend or husband/wife to support me financially.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

19. At times I feel overwhelmed with problems.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

20. In order to feel good about myself, I need to feel independent and self-sufficient.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

21. It is easy for me to tell other people my problems.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

22. People think that I don't have feelings.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

23. The women in my family are survivors.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

24. Often I look happy enough on the outside, but inwardly I feel overwhelmed and unhappy.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

25. I take on more responsibilities for others than I can comfortably handle.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

26. I feel guilty when I put my own needs before the needs of others.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

27. I believe that it is best not to rely on others.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

28. I often take on other people's problems.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

29. I am strong.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

30. I cannot rely on others to meet my needs.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

31. I need people to see me as always confident.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

32. I am independent.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

33. It is important for me to feel strong.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

34. I expect to experience many obstacles in life.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

35. Women of my race are stronger than women of other races.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

36. People often expect me to take care of them.

_____ Never _____Rarely _____Sometimes _____Frequently _____Almost Always

Supplemental Strong Black Woman Schema Questions

Women of my race do NOT like to let others know when they are feeling vulnerable.

Often women of my race look happy enough on the outside, but inwardly they feel overwhelmed and unhappy.

Women of my race are often expected to take care of family members.

Women of my race are always helping someone else.

If women of my race fall apart, they will be a failure.

Women of my race expect to experience many obstacles in life.

APPENDIX E – ANAGRAM TASK

Anagram	Answer
Cytepl	yclept
libee	belie
Nairc	Cairn
Toey	Eyot
Hethy	Hythe
Wopneg	gowpen

APPENDIX F – INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

1. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, digging, aerobics, or fast bicycling?

   _____ **days per week**

   No moderate physical activities

2. How much time did you usually spend doing **vigorous** physical activities on one of those days?

   _____ **hours per day**

   _____ **minutes per day**

   Don't know/Not sure

Think about all the **moderate** activities that you did in the **last 7 days**. **Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal. Think only about those physical activities that you did for at least 10 minutes at a time.

3. During the **last 7 days**, on how many days did you do **moderate** physical activities like carrying light loads, bicycling at a regular pace, or doubles tennis? Do not include walking.

   _____ **days per week**

   No moderate physical activities

4. How much time did you usually spend doing **moderate** physical activities on one of those days?

   _____ **hours per day**

   _____ **minutes per day**

   Don't know/Not sure

Think about the time you spent **walking** in the **last 7 days**. This includes at work and at home, walking to travel from place to place, and any other walking that you have done solely for recreation, sport, exercise, or leisure.

5. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time?

   _____ **days per week**

   No walking

6. How much time did you usually spend **walking** on one of those days?

   _____ **hours per day**

   _____ **minutes per day**

   Don't know/Not sure

The last question is about the time you spent **sitting** on weekdays during the **last 7 days**. Include time spent at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading, or sitting or lying down to watch television.

7. During the **last 7 days**, how much time did you spend **sitting** on a **week day**?

   _____ **hours per day**

   _____ **minutes per day**

   Don't know/Not sure

APPENDIX G – MULTIPLE FOOD CHOICE TEST

Unhealthy


(Sliced Cheese)


(Chocolate)


(Croissant)


(Feta Cheese)


(Salami)


(Sausage)

Less Healthy

(Chips)

(Gummy Candy)

(Ham)

(Ice Cream)

(Salted Pretzels)

(Rice)

Healthy

(Banana)

(Chicken)

(Grapes)

(Pasta)

(Bread)

(Watermelon)

Very Healthy

(Broccoli)

(Carrots)

(Cauliflower)

(Green Peas)

(Potatoes)

(Strawberries)

APPENDIX H – INFLUENTIAL FACTORS

Response options-Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree

1. Talking with family and friends interferes with the time I spend working out
2. Tending to my hair influences how often I work out
3. Tending to the emotions of others interferes with taking care of my own needs
4. Phone calls from family take away from my day

APPENDIX I – WRITTEN VIGNETTES

Increase Condition

Tracy had had a long week at work. She was preparing for a big presentation at work and it was taking up much of her time both during and after work. This presentation was a big deal for her as she was up for a promotion and this presentation could really set her apart from her competition. As the only Black woman in her company, she was constantly putting in extra hours to ensure that she was meeting the standards set for her. Her mother had always taught her that she would always have to work twice as hard to receive even half as much as those around her and that was something that had guided her throughout her time in school and on into her career. Unfortunately, the long hours and dedication has begun to affect her relationship with her boyfriend Todd. He is very supportive of her career and understanding of her hours, but Tracy felt disconnected and unsure about their relationship. Oftentimes Tracy struggled to ask Todd for help when completing tasks, struggling in silence with any issues she faced despite Todd being open about problems and issues he faced at work.

Today Tracy came home after a long day at work to Todd sitting on the couch watching TV. After putting her bag down Tracy goes to sit next to Todd and they begin to discuss their day. As Todd is talking to her about his day Tracy half listens and thinks to herself "He complains for half an hour everyday about how difficult his day and when he finally finishes talking he never asks me about my day. It's so draining." After Todd finished telling her about his day he asks Tracy what she would like for dinner. While they are preparing dinner he asks her how her day was, to which Tracy replies "fine" even though she had had a very busy day that had been very overwhelming. When Todd asks her if anything interesting happened, she replied with a simple "not really." Todd then asks her if she is okay and instead of being honest and telling him that his detailed days were rather draining and made her feel like an afterthought Tracy replied "no, I'm fine.", and changed the subject. As they continued to prepare dinner, Tracy thought to herself "I wish he understood me better, I guess I need to work harder and be more accommodating so that our relationship lasts".

Decrease Condition

Tracy had had a long week at work. She was preparing for a big presentation at work and it was taking up much of her time both during and after work. This presentation was a big deal for her as she was up for a promotion and this presentation could really set her apart from her competition. As the only Black woman in her company, she was constantly putting in extra hours to ensure that she was meeting the standards set for her. Her mother had always taught her that she would always have to work twice as hard to receive even half as much as those around her and that was something that had guided her throughout her time in school and on into her career. Unfortunately, the long hours and dedication has begun to affect her relationship with her boyfriend Todd. He is very supportive of her career and understanding of her hours, and as a result Tracy felt connected to Todd and sure about their relationship. Tracy never struggled to ask Todd for help when completing tasks, and was honest about any issues she faced both at home and at work.

Today Tracy came home after a long day at work to Todd sitting on the couch watching TV. After putting her bag down Tracy goes to sit next to Todd and she asked him about his day. As Todd is talking to her about his day Tracy listens to him and thinks to herself "What a crazy day he had at work." After Todd finished telling her about his day, he asks Tracy how her day was. Tracy then describes her difficult and busy day while the two sit on the couch. After she has described her day to Tadd, he asks her what they should cook for dinner. While cooking dinner together Todd asks Tracy if she has anything on her mind as she appeared to be in deep though. Tracy then begins to inform Todd that she is often frustrated with him not having dinner prepared or at least the meal decided before she gets home, particularly on day when she works late like today. As she and Todd are cooking and discussing a solution to the problem, Tracy thinks to herself " I am so glad that Todd and I have such open communication and I can be honest with him when I am struggling."

Control Condition

Tracy had had a long week at work. She was preparing for a big presentation at work and it was taking up much of her time both during and after work. This presentation was a big deal for her as she was up for a promotion and this presentation could really set her apart from her competition. As the only Black woman in her company, she was constantly putting in extra hours to ensure that she was meeting the standards set for her. Her mother had always taught her that she would always have to work twice as hard to receive even half as much as those around her and that was something that had guided her throughout her time in school and on into her career. Thankfully Tracy worked for a large company, so she was able to develop acquaintanceships with people in other departments, therefore there was no issue of competition.

Today as Tracy was standing in line at the coffee shop inside of her office building her co-worker Lauren, from the department two floors above her joined her in line. The two women discussed a recent company-wide email regarding a change in the type of printer ink used while they waited for their coffee. After receiving the coffee, the two women entered the elevator together and continued discussing other company changes. As Tracy stepped off of the elevator, she waved goodbye to Lauren and began mentally writing her To do list for the day thinking to herself "It was great to see Lauren today. Its always good to catch up with her."

REFERENCES

Abrams, J. A., Hill, A., & Maxwell, M. (2019). Underneath the mask of the strong Black woman schema: Disentangling influences of strength and self-silencing on depressive symptoms among US Black women. *Sex Roles, 80,* 517-526 doi:10.1007/s11199-018-0956-y

Administration for Children and Families Healthy Marriage Initiative, Health and Human Services. (n.d.). *Native American Healthy Marriage Initiative* [Fact sheet]. Retrieved from http://web.archive.org/web/20060926154142/http://www2.acf.hhs.gov/programs/ana/documents/NAHMI_fast_facts.pdf

American Association of Retired Persons. (2019). *Money and the modern grandparent* [Fact sheet]. Retrieved from https://www.aarp.org/content/dam/aarp/research/surveys_statistics/life-leisure/2019/aarp-grandparenting-study-money-fact-sheet.doi.10.26419-2Fres.00289.017.pdf

American Heart Association. (n.d.). *Heart disease in African American women* [Fact sheet]. Retrieved from https://www.goredforwomen.org/en/about-heart-disease-in-women/facts/heart-disease-in-african-american-women.

American Psychological Association. (2011). *Our health at risk: 2011* [Fact sheet]. Retrieved from https://www.apa.org/news/press/releases/stress/2011/health-risk.

American Psychological Association. (2018). *Stress effects on the body* [Fact sheet]. Retrieved from https://www.apa.org/topics/stress/body.

Anyiwo, N., Ward, L. M., Day Fletcher, K., & Rowley, S. (2018). Black adolescents' television usage and endorsement of mainstream gender roles and the Strong Black Woman Schema. *Journal of Black Psychology, 44*(4), *371-397*. https://doi.org/10.1177/0095798418771818

Arambepola, C., Scarborough, P., & Rayner, M. (2008). Validating a nutrient profile model. *Public Health Nutrition*, *11*(4), 371–378. https://doi.org/10.1017/S1368980007000377

Ard, J. D., Zunker, C., Qu, H., Cox, T., Wingo, B., Jefferson, W., & Shewchuk, R. (2013). Cultural perceptions of weight in African American and Caucasian women. *American Journal of Health Behavior*, *37*(1), 3–13. https://doi.org/10.5993/AJHB.37.1.1

Bailey, M., & Trudy. (2018). On misogynoir: Citation, erasure, and plagiarism. *Feminist Media Studies*, *18*(4), 762–768. https://doi.org/10.1080/14680777.2018.1447395

Baker, J. P., & Berenbaum, H. (2007). Emotional approach and problem-focused coping: A comparison of potentially adaptive strategies. *Cognition & Emotion*, *21*(1), 95–118. https://doi.org/10.1080/02699930600562276

Barrington, D.S., James, S.A. & Williams, D.R. Socioeconomic correlates of obesity in African-American and Caribbean-Black men and women. *Journal of Racial and Ethnic Health Disparities 8*(1)**,** 422–432. https://doi.org/10.1007/s40615-020-00798-4

Begley, C., Basu, R., Lairson, D., Reynolds, T., Dubinsky, S., Newmark, M., Barnwell, F., Hauser, A., & Hesdorffer, D. (2011). Socioeconomic status, health care use, and outcomes: Persistence of disparities over time. *Epilepsia*, *52*(5), 957–964. https://doi.org/10.1111/j.1528-1167.2010.02968.x

Blackwell, D. L., & Clarke, T. C. (2018). *State Variation in Meeting the 2008 Federal Guidelines for Both Aerobic and Muscle-strengthening Activities Through Leisure-time Physical Activity Among Adults Aged 18–64: United States, 2010–2015* [Fact sheet]. National Health Statistics Reports. https://www.cdc.gov/nchs/data/nhsr/nhsr112.pdf

Blasingame, D. (2012). The trauma of chattel slavery: A womanist perspective women on Georgia in early American times. [Master's Thesis, Georgia State University] ScholarWorks at Georgia State University database. https://doi.org/10.57709/3095881

Bozsik, F., Whisenhunt, B. L., Hudson, D. L., Bennett, B., & Lundgren, J. D. (2018). Thin is in? Think again: The rising importance of muscularity in the thin ideal female body. Sex Roles, *79*, 609-615. https://doi.org/10.1007/s11199-017-0886-0

Bronfenbrenner, U. (1989). Ecological systems theory (Vol. 6). Greenwich, CT: JAI.

Brown, A., Wilson, D. K., Sweeney, A. M., & Van Horn, M. L. (2020). The moderating effects of social support and stress on physical activity in African American women. *Annals of Behavioral Medicine, 55*(4), 376-382. https://doi.org/10.1093/abm/kaaa051

Carter-Edwards, L., Bastian, L. A., Revels, J., Durham, H., Lokhnygina, Y., Amamoo, M. A., & Ostbye, T. (2010). Body image and body satisfaction differ by race in overweight postpartum mothers. *Journal of Women's Health*, *19*(2), 305–311. https://doi.org/10.1089/jwh.2008.1238

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, *56*(2), 267–283. https://doi.org/10.1037/0022-3514.56.2.267

Center for Disease for Control Prevention. (2022)a. *Prevalence of diagnosed diabetes* [Dataset]. Centers for Disease Control and Prevention. https://www.cdc.gov/diabetes/data/statistics-report/diagnosed-diabetes.html

Center for Disease Control and Prevention. (2022)b. *National Health and Nutrition Examination Survey* [Dataset]. Centers for Disease Control and Prevention. https://wwwn.cdc.gov/nchs/nhanes/continuousnhanes/default.aspx?BeginYear=2021

Chithambo, T. P., & Huey, S. J. (2013). Black/white differences in perceived weight and attractiveness among overweight women. *Journal of Obesity*, 2013, 320326. https://doi.org/10.1155/2013/320326

Chapman, P. L., & Mullis, R. L. (2000). Racial differences in adolescent coping and self-esteem. The Journal of Genetic Psychology, *161*(2), 152–160. https://doi.org/10.1080/00221320009596702

Clark, A. M., DesMeules, M., Luo, W., Duncan, A. S., & Wielgosz, A. (2009). Socioeconomic status and cardiovascular disease: risks and implications for care. *Nature Reviews. Cardiology*, *6*(11), 712–722. https://doi.org/10.1038/nrcardio.2009.163

Meraji, S. M., & Demby, G (Hosts). (2016-present).*Code Switc*h [Audio podcast]. National Public Radio https://www.npr.org/2021/09/28/1041366972/the-rise-of-the-bbl.

Cole, J. B., & Florez, J. C. (2020, May 12). Genetics of diabetes mellitus and diabetes complications [Fact sheet]. Nature News. https://www.nature.com/articles/s41581-020-0278-5.

Coleman, N. (2020). An examination of the correlation between grit and the expressed symptoms of depression and anxiety [Unpublished doctoral dissertation]. The Chicago School of Professional Psychology).

Collins, P. H. (2006). *Black sexual politics: African Americans, gender, and the new racism.* Routledge.

Costello, E., Huhn, K., Healey, W. E., Hilliard, M. J., Plack, M. M., & Maring, J. (2022). Exploration of Grit, self-reflection and insight, and anxiety: A multisite study of doctor of physical therapy students. *Journal of Physical Therapy Education, 36(3),* 196-204. https://doi.org/10.1097/JTE.0000000000000246

Cozier, Y. (2022, February). POV: What "Strong Black Woman" Means to Me. *Boston University*. https://www.bu.edu/articles/2022/pov-what-strong-black-woman-means-to-me/.

Craig, C. L., Marshall, A. L., Sjöström, M., Bauman, A. E., Booth, M. L., Ainsworth, B. E., Pratt, M., Ekelund, U., Yngve, A., Sallis, J. F., & Oja, P. (2003). International physical activity questionnaire: 12-country reliability and validity. *Medicine and Science in Sports and Exercise*, *35*(8), 1381–1395. https://doi.org/10.1249/01.MSS.0000078924.61453.FB

Crossland, C., Palmer, J., & Brooks, A. (2013). NIJ's program of research on violence against American Indian and Alaska Native women. *Violence Against Women*, *19*(6), 771–790. https://doi.org/10.1177/1077801213494706

Cusick Director, J., Cusick, J., Seeberger Director, C., Seeberger, C., Oduyeru Manager, L., Oduyeru, L., Gordon Director, P., Gordon, P., Shepherd Director, M., Shepherd, M., Director, J. P. D., Parshall, J., Director, D., Allsbrook, J. F., Truschel, L., Maxwell,

C., Novoa, C., Spitzer, E., Graves-Fitzsimmons, G., … Mahowald, L. (2021, March 25). *Health disparities by race and ethnicity* [Fact sheet]. Center for American Progress. https://americanprogress.org/article/health-disparities-race-ethnicity/.

DeLany, J. P., Jakicic, J. M., Lowery, J. B., Hames, K. C., Kelley, D. E., & Goodpaster, B. H. (2014). African American women exhibit similar adherence to intervention but lose less weight due to lower energy requirements. *International Journal of Obesity*, *38*(9), 1147–1152. https://doi.org/10.1038/ijo.2013.240

Department of Health and Human Services. (2020). *Infographic: Racial/ethnic disparities in pregnancy-related deaths - United States, 2007–2016* [Fact sheet]. Centers for Disease Control and Prevention. https://www.cdc.gov/reproductivehealth/maternal-mortality/disparities-pregnancy-related-deaths/infographic.html.

Donovan, R. A., West, L. M. (2015). Stress and mental health: Moderating role of the strong Black woman stereotype. *Journal of Black Psychology*, *41*, 384–396. doi:10.1177/0095798414543014

Donovan, R. A. (2011). Tough or tender: (Dis)similarities in White college tudents' perceptions of Black and White Women. *Psychology of Women Quarterly*, *35*(3), 458–468. https://doi.org/10.1177/0361684311406874

Dovidio, J. F., Evans, N., & Tyler, R. B. (1986). Racial stereotypes: The contents of their cognitive representations. *Journal of Experimental Social Psychology*, *22*(1), 22-37.

Ellemers, N. (2018). Gender stereotypes. *Annual Review of Psychology*, *69*, 275-298. https://doi.org/10.1146/annurev-psych-122216-011719

Endler, N. S., & Parker, J. D. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology, 58*(5), 844–854. https://doi.org/10.1037//0022-3514.58.5.844

Everett, J. E., Camille Hall, J., & Hamilton-Mason, J. (2010). Everyday conflict and daily stressors: Coping responses of Black women. *Affilia, 25*(1), 30–42. https://doi.org/10.1177/0886109909354983

Ferber, A. L. (2007). The construction of Black masculinity: White supremacy now and then. *Journal of Sport and Social Issues, 31*(1), 11-24. https://doi.org/10.1177/0193723506296829

Flood, S., King, M., Rodgers, R., Ruggles, S., and Warren. J.R., (2018). *Integrated public use microdata series, Current population survey IPUMS* (Version 6.0) [Data set]. https://doi.org/10.18128/D030.V6.0

Flórez, K. R., Richardson, A. S., Ghosh-Dastidar, M. B., Troxel, W., DeSantis, A., Colabianchi, N., & Dubowitz, T. (2018). The power of social networks and social support in promotion of physical activity and body mass index among African American adults. *Population Health, 4*, 327–333. https://doi.org/10.1016/j.ssmph.2018.03.004

Florida Department of Health. (2021) *Florida county-level behavioral risk factors surveillance telephone survey: Percent of adults who consume at least five servings of fruits and vegetables a day* [Fact sheet]. Bureau of Epidemiology http://www.floridacharts.com/charts/default.aspx.

Frisby, C. M. (2004). Does race matter? Effects of idealized images on African American women's perceptions of body esteem. *Journal of Black Studies, 34*(3), 323–347. https://doi.org/10.1177/0021934703258989

Gans, K. M., Risica, P. M., Kirtania, U., Jennings, A., Strolla, L. O., Steiner-Asiedu, M., Hardy, N., & Lasater, T. M. (2009). Dietary behaviors and portion sizes of black women who enrolled in SisterTalk and variation by demographic characteristics. *Journal of Nutrition Education and Behavior, 41*(1), 32-40. https://doi: 10.1016/j.jneb.2008.05.013

Geronimus A.T. (1992). The weathering hypothesis and the health of African-American women and infants: Evidence and speculations. *Ethnicity & Disease, 2*(3), 207-221.

Geronimus, A. T., Hicken, M. T., Pearson, J. A., Seashols, S. J., Brown, K. L., & Cruz, T. D. (2010). Do US Black women experience stress-related accelerated biological aging?: A novel theory and first population-based test of black-white differences in telomere length. *Human Nature, 21*(1), 19–38. https://doi.org/10.1007/s12110-010-9078-0

Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). "Weathering" and age patterns of allostatic load scores among blacks and whites in the United States. *American Journal of Public Health, 96*(5), 826–833. https://doi.org/10.2105/AJPH.2004.060749

Ghavami, N., & Peplau, L. A. (2013). An intersectional analysis of gender and ethnic stereotypes: Testing three hypotheses. *Psychology of Women Quarterly, 37*(1), 113–127. https://doi.org/10.1177/0361684312464203

Goedluck, L. (2021, June 2). Apetamin: The illegal slim-thick wonder drug that preys on black women's insecurities. *Gal-dem*. https://gal-dem.com/apetamin-is-illegally-sold-as-a-wonder-drug-to-black-women-trying-to-become-slim-thick/.

Golden, M. (2021). *The Strong Black Woman: How a myth endangers the physical and mental health of black women.* Mango Publishing.

Gray, B. A., Keith, V. M. (2003). The benefits and costs of social support for African American women. In D. R Brown & V. M. Keith, (Eds.), *In and out of our right minds: The mental health of African American women* (pp. 242-257). New York, NY: Columbia University Press.

Harrington, E. F., Crowther, J. H., & Shipherd, J. C. (2010). Trauma, binge eating, and the "strong Black woman". *Journal of Consulting and clinical Psychology*, *78*(4), 469–479. https://doi.org/10.1037/a0019174

Harris-Lacewell, M. (2001). No place to rest: African American political attitudes and the myth of Black women's strength. *Women and Politics, 23*(3), 1-33. https://doi.org/10.1300/J014v23n03_01

Haynes, F. E. (2000). Gender and family ideals: An exploratory study of Black middle-class Americans. *Journal of Family Issues*, *21*(7), 811 837. https://doi.org/10.1177/019251300021007001

Heck, J. L., Jones, E. J., Bohn, D., McCage, S., Parker, J. G., Parker, M., Pierce, S. L., & Campbell, J. (2021). Maternal mortality among American Indian/Alaska Native women: A scoping review. *Journal of Women's Health*, *30*(2), 220–229. https://doi.org/10.1089/jwh.2020.8890

Hill, L., Ndugga, N., & Artiga, S. (2023). *Key data on health and health care by race and ethnicity*. Kaiser Family Foundation. https://www.kff.org/racial-equity-and-health-policy/report/key-data-on-health-and-health-care-by-race-and-ethnicity/.

Howard, G., Cushman, M., Moy, C. S., Oparil, S., Muntner, P., Lackland, D. T., Manly, J. J., Flaherty, M. L., Judd, S. E., Wadley, V. G., Long, D. L., & Howard, V. J. (2018). Association of clinical and social factors With excess hypertension risk in Black compared with White US adults. *JAMA*, *320*(13), 1338–1348. https://doi.org/10.1001/jama.2018.13467

Hughes, E. (2020). “I’m supposed to be thick”: Managing body image anxieties among black American women. *Journal of Black Studies*, *52*(3), 310–330. https://doi.org/10.1177/0021934720972440

Huo, M., Kim, K., Zarit, S. H., & Fingerman, K. L. (2018). Support grandparents give to their adult grandchildren. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, *73*(6), 1006–1015. https://doi.org/10.1093/geronb/gbw208

Huyser, K. R., Rockell, J., Jernigan, V. B. B., Taniguchi, T., Wilson, C., Manson, S. M., & O'Connell, J. (2019). Sex differences in diabetes prevalence, comorbidities, and health care utilization among American Indians living in the northern plains. *Current Developments in Nutrition*, *4*(1), 42–48. https://doi.org/10.1093/cdn/nzz089

James, S.A., Hartnett, S.A. & Kalsbeek, W.D. (1983). John Henryism and blood pressure differences among black men. *Journal of Behavioral Medicine 6*, 259–278. https://doi.org/10.1007/BF01315113

Javed, Z., Haisum Maqsood, M., Yahya, T., Amin, Z., Acquah, I., Valero-Elizondo, J., Andrieni, J., Dubey, P., Jackson, R. K., Daffin, M. A., Cainzos-Achirica, M., Hyder, A. A., & Nasir, K. (2022). Race, racism, and cardiovascular health: Applying a social determinants of health framework to racial/ethnic disparities in cardiovascular disease. *Circulation. Cardiovascular Quality and Outcomes*, *15*(1), e007917. https://doi.org/10.1161/CIRCOUTCOMES.121.007917

Jerald, M. C., Cole, E. R., Ward, L. M., & Avery, L. R. (2017). Controlling images: How awareness of group stereotypes affects Black women's well-being. *Journal of Counseling Psychology*, *64*(5), 487–499. https://doi.org/10.1037/cou0000233

Joseph, K. S., Boutin, A., Lisonkova, S., Muraca, G. M., Razaz, N., John, S., Mehrabadi, A., Sabr, Y., Ananth, C. V., & Schisterman, E. (2021). Maternal mortality in the United States: recent trends, current status, and future considerations. *Obstetrics and Gynecology*, *137*(5), 763–771. https://doi.org/10.1097/AOG.0000000000004361

Johnson, R. K., Appel, L. J., Brands, M., Howard, B. V., Lefevre, M., Lustig, R. H., Sacks, F., Steffen, L. M., & Wylie-Rosett, J. (2009). Dietary sugars intake and cardiovascular health. *Circulation*, *120*(11), 1011–1020. https://doi.org/10.1161/circulationaha.109.192627

Jones, C., & Shorter-Gooden, K. (2003). Shifting: The double lives of Black women in America. New York, NY: HarperCollins.

Kannangara, C. S., Allen, R. E., Waugh, G., Nahar, N., Khan, S. Z. N., Rogerson, S., & Carson, J. (2018). All that glitters is not grit: Three studies of grit in university students. *Frontiers in Psychology*, *9*, 1539. https://doi.org/10.3389/fpsyg.2018.01539

Kilanowski J. F., PhD Rn Aprn Cpnp Faan (2017). Breadth of the socio-ecological model. *Journal of Agromedicine*, *22*(4), 295–297. https://doi.org/10.1080/1059924X.2017.1358971

Krieger, N., Chen, J. T., Coull, B. A., Beckfield, J., Kiang, M. V., & Waterman, P. D. (2014). Jim Crow and premature mortality among the US Black and White population, 1960-2009: an age-period-cohort analysis. *Epidemiology*, *25*(4), 494–504. https://doi.org/10.1097/EDE.0000000000000104

Kumanyika, S., Wilson, J. F., & Guilford-Davenport, M. (1993). Weight-related attitudes and behaviors of black women. *Journal of the American Dietetic Association*, *93*(4), 416–422. https://doi.org/10.1016/0002-8223(93)92287-8

Kwate, N. O., Valdimarsdottir, H. B., Guevarra, J. S., & Bovbjerg, D. H. (2003). Experiences of racist events are associated with negative health consequences for African American women. *Journal of the National Medical Association*, *95*(6), 450–460.

Landrine, H. (1985). Race X class stereotypes of women. *Sex Roles*, *13*(1-2), 65–75. https://doi.org/10.1007/bf00287461

Lee, Joey. 2018. "East Asian "china doll" or "dragon lady"?." *Bridges: An Undergraduate Journal of Contemporary Connections*, *3*(1). https://scholars.wlu.ca/bridges_contemporary_connections/vol3/iss1/2

Lee, P. H., Macfarlane, D. J., Lam, T. H., & Stewart, S. M. (2011). Validity of the international physical activity questionnaire short form (IPAQ-SF): A systematic review. *The International Journal of Behavioral Nutrition and Physical Activity*, *8*, 115. https://doi.org/10.1186/1479-5868-8-115

Liao, K. Y.-H., Wei, M., & Yin, M. (2019). The misunderstood schema of the Strong Black Woman: Exploring its mental health consequences and coping responses among African American women. *Psychology of Women Quarterly*, *44*(1), 84–104. https://doi.org/10.1177/0361684319883198

Logan, J. G., Barksdale, D. J., James, S. A., & Chien, L.-C. (2017). John Henryism active coping, Acculturation, and psychological health in Korean immigrants. *Journal of Transcultural Nursing*, *28*(2), 168–178. https://doi.org/10.1177/1043659615615402

Luo, M., Ding, D., Bauman, A., Negin, J., & Phongsavan, P. (2020). Social engagement pattern, health behaviors and subjective well-being of older adults: An international perspective using WHO-SAGE survey data. *BMC Public Health*, *20*(1), 99. https://doi.org/10.1186/s12889-019-7841-7

Martin, J. (2018). Social support and leisure time physical activity in young Black women. *College Student Journal*, *52*(1), 139-149.

Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, *37*(7), 1401–1415. https://doi.org/10.1016/j.paid.2004.01.010

McKinley, C. E., Liddell, J., & Lilly, J. (2021). All work and no Ppay: Indigenous women "Pulling the weight" in home life. *The Social Service Review*, *95*(2), 278–311. https://doi.org/10.1086/714551

McLellan, S. (2019, September). Let's end the 'Strong Black Woman' stereotype. Can't we be vulnerable and emotional too? *Huffington Post.* https://www.huffingtonpost.co.uk/entry/black-women-stereotypes_uk_5d8b820ce4b0c6d0cef500df.

Miller, S., Wherry, L. R., & Mazumder, B. (2021). Estimated mortality increases during the COVID-19 pandemic by socioeconomic status, race, and ethnicity. *Health Affairs*, *40*(8), 1252–1260. https://doi.org/10.1377/hlthaff.2021.00414

Miller, D. K., Malmstrom, T. K., Joshi, S., Andresen, E. M., Morley, J. E., Wolinsky, F. D. (2004). Clinically relevant levels of depressive symptoms in community-dwelling middle-aged Blacks. *Journal of the American Geriatric Society*, *52*(5), 741-748. https://doi.org/10.1111/j.1532-5415.2004.52211.x

Mofid, M. M., Teitelbaum, S., Suissa, D., Ramirez-Montañana, A., Astarita, D. C., Mendieta, C., & Singer, R. (2017). Report on mortality from gluteal fat grafting: Recommendations from the ASERF Task Force. *Aesthetic Surgery Journal*, *37*(7), 796–806. https://doi.org/10.1093/asj/sjx004

Moore, S. C., Patel, A. V., Matthews, C. E., Berrington de Gonzalez, A., Park, Y., Katki, H. A., Linet, M. S., Weiderpass, E., Visvanathan, K., Helzlsouer, K. J., Thun, M., Gapstur, S. M., Hartge, P., & Lee, I. M. (2012). Leisure time physical activity of moderate to vigorous intensity and mortality: A large pooled cohort analysis. *PLoS Medicine*, *9*(11), e1001335. https://doi.org/10.1371/journal.pmed.1001335

Musumari, P. M., Tangmunkongvorakul, A., Srithanaviboonchai, K., Techasrivichien, T., Suguimoto, S. P., Ono-Kihara, M., & Kihara, M. (2018). Grit is associated with lower level of depression and anxiety among university students in Chiang Mai, Thailand: A cross-sectional study. *PloS one*, *13*(12), e0209121. https://doi.org/10.1371/journal.pone.0209121

National Center for Education Statistics (2008). Status and trends in the education of American Indians and Alaska Natives: 2008 [Fact Sheet]. http://nces.ed.gov/pubs2008/nativetrends/ind_6_1.asp.

National Center for Health Statistics. (2018). Health, United States 2018 [Fact sheet]. Center for Disease Control. https://www.cdc.gov/nchs/data/hus/hus18.pdf.

National Cancer Institute. The genetics of cancer. (n.d.), from https://www.cancer.gov/about-cancer/causes-prevention/genetics.

Nelson, T., Shahid, N. N., & Cardemil, E. V. (2020). Do I really need to go and see somebody? Black women's perceptions of help-seeking for depression. *Journal of Black Psychology*, *46*(4), 263–286. https://doi.org/10.1177/0095798420931644

Niemann, Y. F., Jennings, L., Rozelle, R. M., Baxter, J. C., & Sullivan, E. (1994). Use of free responses and cluster analysis to determine stereotypes of eight groups. *Personality and Social Psychology Bulletin*, *20*(4), 379–390. https://doi.org/10.1177/0146167294204005

Noble, D., & Palmer, L. A. (2022). Misogynoir: Anti-blackness, patriarchy, and refusing the wrongness of Black women. *The Palgrave Handbook of Critical Race and Gender*, 227–245. https://doi.org/10.1007/978-3-030-83947-5_12

Ogden, C., (2009) Disparities in obesity prevalence in the United States: Black women at risk. *The American Journal of Clinical Nutrition*, *89*(4), Pages 1001–1002, https://doi.org/10.3945/ajcn.2009.27592

Onibada, A., & Dahir, I. (2021). Black women are taking this dangerous weight gain drug to get thick. *BuzzFeed News*.

https://www.buzzfeednews.com/article/adeonibada/apetamin-weight-gain-supplement-instagram-y-instagram.

Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior*, *19*(1), 2. https://doi.org/10.2307/2136319

Perry, B. L., Harp, K. L., & Oser, C. B. (2013). Racial and gender discrimination in the stress process: Implications for African American women's health and well-being. *Sociological Perspectives*, *56*(1), 25–48.

Physical Activity Guidelines for Americans. Office of Disease Prevention and Health Promotion. (n.d.). https://health.gov/.

Poran, M. A. (2002). Denying diversity: Perceptions of beauty and social comparison processes among Latina, Black, and White women. *Sex Roles: A Journal of Research*, *47*(1-2), 65–81. https://doi.org/10.1023/A:1020683720636

Rayner, M., Scarborough, P., Stockley, L. and Boxer, A. (2005) *Nutrient profiles; Further refinement and testing of model SSCg3d.* [Report].

http://www.food.gov.uk/multimedia/pdfs/npreportsept05.pdf

Reed, J., Pritschet, B. L., & Cutton, D. M. (2013). Grit, conscientiousness, and the transtheoretical model of change for exercise behavior. *Journal of Health Psychology*, *18*(5), 612–619. https://doi.org/10.1177/1359105312451866

Romero, R. E. (2000). The icon of the strong Black woman: The paradox of strength. In L. C. Jackson & B. Greene (Eds.), *Psychotherapy with African American women: Innovations in psychodynamic perspective and practice* (pp. 225–238). The Guilford Press.

Rosenthal, L., & Lobel, M. (2011). Explaining racial disparities in adverse birth outcomes: Unique sources of stress for Black American women. *Social Science & Medicine, 72*(6), 977–983. https://doi.org/10.1016/j.socscimed.2011.01.013

Roth, D. L., Haley, W. E., Wadley, V. G., Clay, O. J., & Howard, G. (2007). Race and gender differences in perceived caregiver availability for community-dwelling middle-aged and older adults. *The Gerontologist, 47*(6), 721–729. https://doi.org/10.1093/geront/47.6.721

Sanderson, S., Lupinski, K., & Moch, P. (2013). Is big really beautiful? Understanding body image perceptions of African American females. Journal of Black Studies, *44*(5), 496–507. https://doi.org/10.1177/0021934713497059

Schreiber, M., Bucher, T., Collins, C. E., & Dohle, S. (2020). The multiple food test: Development and validation of a new tool to measure food choice and applied nutrition knowledge. *Appetite, 150,* 104647. https://doi.org/10.1016/j.appet.2020.104647

Settles, I. H., Pratt-Hyatt, J. S., & Buchanan, N. T. (2008). Through the lens of race: Black and White women's perceptions of womanhood. *Psychology of Women Quarterly, 32*(4), 454–468. https://doi.org/10.1111/j.1471-6402.2008.00458.x

Signorello, L. B., Cohen, S. S., Williams, D. R., Munro, H. M., Hargreaves, M. K., & Blot, W. J. (2014). Socioeconomic status, race, and mortality: A prospective cohort study. *American Journal of Public Health, 104*(12), e98–e107. https://doi.org/10.2105/AJPH.2014.302156

Sharma, M., Sargent, L., & Stacy, R. (2005). Predictors of leisure-time physical activity among African American women. *American Journal of Health Behavi*or, *29*(4), 352–359. https://doi.org/10.5993/ajhb.29.4.7

Sharp, T. A., Bell, M. L., Grunwald, G. K., Schmitz, K. H., Sidney, S., Lewis, C. E., Tolan, K., & Hill, J. O. (2002). Differences in resting metabolic rate between White and African-American young adults. *Obesity Research*, *10*(8), 726–732. https://doi.org/10.1038/oby.2002.99

Speight, S. L., Isom, D. A., & Thomas, A. J. (2013). From Hottentot to Superwoman: Issues of identity and mental health for African American women. In C. Z. Enns & E. N. Williams (Eds.), *The Oxford handbook of feminist multicultural counseling psychology* (pp. 115–130). Oxford University Press.

Stanton, A. G., Jerald, M. C., Ward, L. M., & Avery, L. R. (2017). Social media contributions to Strong Black Woman ideal endorsement and Black women's mental health. *Psychology of Women Quarterly, 41*(4), 465–478. https://doi.org/10.1177/0361684317732330

Story, M., Evans, M., Fabsitz, R. R., Clay, T. E., Holy Rock, B., & Broussard, B. (1999). The epidemic of obesity in American Indian communities and the need for childhood obesity-prevention programs. *The American Journal of Clinical Nutrition, 69*(4), 747S–754S. https://doi.org/10.1093/ajcn/69.4.747S

Sun, S. (2023). *National Snapshot: Poverty Among Women & Families* [Fact sheet]. National Women's Law Center. https://nwlc.org/wp-content/uploads/2023/02/2023_nwlc_PovertySnapshot-converted-1.pdf

Thomas, A. J., Witherspoon, K. M., & Speight, S. L. (2004). Toward the development of the stereotypic roles for Black Women Scale. *Journal of Black Psychology*, *30*(3), 426–442. https://doi.org/10.1177/0095798404266061

Thomas, Z., Banks, J., Eaton, A. A., & Ward, L. M. (2022). 25 years of psychology research on the "strong black woman". Social and Personality Psychology Compass, *16*(9), e12705. https://doi.org/10.1111/spc3.12705

Thompson, F. E., Midthune, D., Kahle, L., & Dodd, K. W. (2017). Development and evaluation of the national cancer institute's dietary screener questionnaire scoring algorithms. The Journal of Nutrition, 1*47*(6), 1226–1233. https://doi.org/10.3945/jn.116.246058

The Aesthetic Society. (2021). *Aesthetic Plastic Surgery National Databank* [Dataset]. Phoenix, AZ. Retrieved 2023. https://cdn.theaestheticsociety.org/media/statistics/2021-TheAestheticSocietyStatistics.pdf

The Treadmill Review. (2022). *Building the perfect 3D body*. TreadmillReviews.net. https://www.treadmillreviews.net/building-the-perfect-body/

Time's Up Foundation. (2021). *Gender and racial inequity during crisis: The pay gap*. Luna Bar., https://view.publitas.com/perryundem-research-communication/perryundem-times-up-report_optimized/page/5

Trost, S., Beauregard, J., Chandra, G., Njie, F., Berry, J., Harvey, A., & Goodman, D. A. (2022). *Pregnancy-related deaths: Data from maternal mortality review committees in 36 US States, 2017–2019*. Center for Disease Control and Prevention.

https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/data-mmrc.html.

Tsai, W., & Lu, Q. (2018). Culture, emotion suppression and disclosure, and health. *Social and Personality Psychology Compass, 12*(3), 1-13. https://doi.org/10.1111/spc3.12373

US Census Bureau. (2019). *Population and housing unit estimates* [Dataset]. Census.gov. https://www.census.gov/programs-surveys/popest.html

US Census Bureau. (2022). *2021 annual social and economic supplements* [Dataset]. Census.gov. https://www.census.gov/programs-surveys/popest.html

United States Department of Health and Human Services. (2021). *How you can prevent chronic diseases* [Fact sheet]. Centers for Disease Control and Prevention. https://www.cdc.gov/chronicdisease/about/prevent/index.htm.

Ventura M., Shute V., Zhao W. (2013). The relationship between video game use and a performance-based measure of persistence. *Computers & Education*, *60*, 52-58. https://doi.org/10.1016/j.compedu.2012.07.003

Violence Policy Center. (2022). *When men murder women* [Fact sheet]. Violence Policy Center. https://vpc.org/when-men-murder-women/

Warren, B. J. (1997). Depression, stressful life events, social support, and self-esteem, in middle class Black women. *Archives of Psychiatric Nursing*, *11*(3), 107-117. https://doi.org/10.1016/S0883-9417(97)80033-7

Weitz, R., & Gordon, L. (1993). Images of Black women among Anglo college students. Sex Roles: A Journal of Research, *28*(1-2), 19–34. https://doi.org/10.1007/BF00289745

West, C. M. (1995). Mammy, sapphire, and jezebel: Historical images of Black women and their implications for psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, *32*(3), 458–466. https://doi.org/10.1037/0033-3204.32.3.458

West, L. M., Donovan, R. A., & Daniel, A. R. (2016). The price of strength: Black college women's perspectives on the Strong Black Woman stereotype. *Women & Therapy*, *39*(3-4), 390–412. https://doi.org/10.1080/02703149.2016.1116871

Wight, V. R., Bianchi, S. M., & Hunt, B. R. (2013). Explaining racial/ethnic variation in partnered women's and men's housework: Does one size fit all?. *Journal of Family Issues*, *34*(3), 394–427. https://doi.org/10.1177/0192513x12437705

Witherspoon, K.M., Thomas, A.J., & Speight, S.L. (unpublished manuscript). The role of stereotypical images in the psychological functioning of African American women.

Wolfe W. A. (2000). Obesity and the African-American woman: A cultural tolerance of fatness or other neglected factors. *Ethnicity & Disease*, *10*(3), 446–453.

Woods, K.C. (2013). The Strong Black Woman Archetype and intentions to seek therapy for depression: A cultural application of the theory of planned behavior [Unpublished doctoral dissertation, Michigan State University]. https://d.lib.msu.edu/etd/2278

Woods-Giscombé, C. L. (2010). Superwoman schema: African American women's views on stress, strength, and health. *Qualitative Health Research*, *20*(5), 668–683. https://doi.org/10.1177/1049732310361892

Woods-Giscombe, C. L., Allen, A. M., Black, A. R., Steed, T. C., Li, Y., & Lackey, C. (2019). The Giscombe Superwoman schema questionnaire: Psychometric properties and associations with mental health and health behaviors in African American

women. *Issues in Mental Health Nursing*, *40*(8), 672–681. https://doi.org/10.1080/01612840.2019.15846

Woods-Giscombé, C. L., Lobel, M., Zimmer, C., Wiley Cené, C., & Corbie-Smith, G. (2015). Whose stress is making me sick? Network-stress and emotional distress in African-American women. *Issues in Mental Health Nursing*, *36*(9), 710–717. https://doi.org/10.3109/01612840.2015.1011759