

12-14-2017

Black Girl Magic? The Influence of the Strong Black Woman Schema on the Mental Health of Black Women in the United States

Stephanie Hall

Follow this and additional works at: http://scholarworks.gsu.edu/sociology_diss

Recommended Citation

Hall, Stephanie, "Black Girl Magic? The Influence of the Strong Black Woman Schema on the Mental Health of Black Women in the United States." Dissertation, Georgia State University, 2017.
http://scholarworks.gsu.edu/sociology_diss/99

This Dissertation is brought to you for free and open access by the Department of Sociology at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Sociology Dissertations by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

**BLACK GIRL MAGIC? THE INFLUENCE OF THE STRONG BLACK WOMAN
SCHEMA ON THE MENTAL HEALTH OF BLACK WOMEN IN THE UNITED
STATES**

by

STEPHANIE PATRICE HALL

Under the Direction of Eric R. Wright, PhD

ABSTRACT

The Strong Black Woman Schema (SBWS) refers to the collective beliefs, behaviors, resources and responses Black women are socialized to embody. The SBWS was developed as a positive counterimage to the negative stereotypes of Black women, such as the mammy or the jezebel, and is an important image among Black women. Observations suggest that the SBWS may affect how Black women experience and interpret stress and mental illness. I assert the SBWS may serve as one comprehensive explanation for the mental health outcomes observed for Black women. Qualitative and quantitative studies have identified a set of characteristics (i.e. strength, emotion regulation, caretaking) related to the schema. However, scales developed to measure the schema lack the ability to isolate adequately a unique typology for Black women. I argue that the SBWS is representative of a specific compilation of psychosocial resources (i.e.

mastery, self-efficacy, resilience, self-esteem) representative of the cultural response to historical experiences of racism and sexism. I explore how the SBWS influences the reporting of depressive symptoms, depression and anxiety through a secondary data analysis of African American, Caribbean Black and White American women using data from the National Survey of American Life. Through a three part analysis, I answer the following questions: 1) Is a compilation of psychosocial measures an appropriate measure of the Strong Black Woman Schema? 2) What sociodemographic factors influence distinct typologies reflective of at least one uniquely Black form of the Strong Black Woman Schema? And 3) Does the Strong Black Woman Schema influence depressive symptoms, depression, and anxiety? Results of this study clarify how socio-cultural aspects of oppression influence the mental health of Black women.

INDEX WORDS: Depressive Symptoms, Depression, Anxiety, Latent Class Analysis, National Survey of American Life

BLACK GIRL MAGIC? THE INFLUENCE OF THE STRONG BLACK WOMAN SCHEMA
ON THE MENTAL HEALTH OF BLACK WOMEN IN THE UNITED STATES

by

STEPHANIE PATRICE HALL

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

in the College of Arts and Sciences

Georgia State University

2017

Copyright by
Stephanie Patrice Hall
2017

BLACK GIRL MAGIC? THE INFLUENCE OF THE STRONG BLACK WOMAN
SCHEMA ON THE MENTAL HEALTH OF BLACK WOMEN IN THE UNITED STATES

by

STEPHANIE PATRICE HALL

Committee Chair: Eric R. Wright

Committee: Mathew Gayman

Katherine Masyn

Kisha B. Holden

Electronic Version Approved:

Office of Graduate Studies

College of Arts and Sciences

Georgia State University

August 2017

DEDICATION

To my Father. My angel. This is for you.

To the Black women who struggle with strength but are still full of magic.

ACKNOWLEDGEMENTS

I'd like to thank my committee, Eric Wright, Mathew Gayman, Katherine Masyn, and Kisha Holden, for guiding me through this process, fully supporting my ideas and research agenda and challenging me in ways that have improved my scholarship.

I'd also like to give a special thanks to my tribe, all of my homies, who were with me at all of the all day, late night, writing sessions; who provided words of encouragement, reviewed drafts, listened to me talk out my ideas, recommended articles and books, provided food, prayers, laughs, hugs, coffee, tea, wine and whiskey. Thank you Stephanie, Colin, Elizabeth, Portia, Lauren, Cayla, Jibril, Kiersten, Kia, Maria, Samantha, Jonathan, and everyone I might be forgetting.

Finally, I must give thanks to my family for being my biggest support group and inspirations.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	V
LIST OF TABLES	VIII
LIST OF FIGURES	X
LIST OF ABBREVIATIONS	XI
1 INTRODUCTION	1
1.1 Purpose of the Study	3
2 LITERATURE REVIEW	4
2.1 Mental Health and Black Women	4
2.2 The Strong Black Woman	6
<i>2.2.1 Historical and Social Context of the Strong Black Woman.....</i>	<i>6</i>
<i>2.2.2 Gendered Racial Socialization and Controlling Images</i>	<i>9</i>
<i>2.2.3 History of Disappointment, Mistreatment, and Abuse</i>	<i>12</i>
<i>2.2.4 Conceptualization of the Strong Black Woman.....</i>	<i>13</i>
<i>2.2.5 Measurement of the Strong Black Woman Schema.....</i>	<i>20</i>
<i>2.2.6 Strong Black Woman Schema within a Stress Process Framework.....</i>	<i>26</i>
<i>2.2.6.3 Socioeconomic Statu</i>	<i>31</i>
<i>2.2.7 Strong Black Woman and Mental Health.....</i>	<i>34</i>
<i>2.2.8 Aims of this Study</i>	<i>38</i>
3 METHODS.....	41

3.1	Study Sample	41
3.2	Measures	42
3.3	Analysis	47
	3.3.1 <i>Development and validation of a measure of the Strong Black Woman</i>	
	<i>Schema</i>	47
	3.3.2 <i>Sciodemographic influences of the Strong Black Woman Schema and</i>	
	<i>influence on mental health outcomes?</i>	49
4	RESULTS	51
4.1	Descriptive Results for Analytic Sample.....	51
4.2	Development of the Strong Black Woman Schema.....	54
4.3	Sociodemographic Covariates and Mental Health Outcomes.....	60
5	DISCUSSION.....	67
5.1	Limitations	70
5	CONCLUSION	71
	REFERENCES.....	73
	APPENDICES	81
	Appendix A. NSAL Survey Items	82
	Appendix B. Model Fit Indices for Cross-Validation Subsamples	85

LIST OF TABLES

Table 1. Summary Descriptive Statistics by Race/Ethnicity (weighted).....	52
Table 2. Average Depressive Symptom Score and Proportion of 30-day Depression and 30-day Anxiety Endorsement.....	53
Table 3. Confirmatory Factor Analysis Model Results	55
Table 4. Model Fit Indices for Exploratory Latent Class Analysis Using Full Sample (N=2275)	57
Table 5. Model Classification Diagnostics for the Two-Class Unconditional Latent Class Analysis ($E_2=.55$) for Full Sample.....	57
Table 6. Model Estimated, Class-Specific Item Response Probabilities and Odds Ratios Based on a Two-Class Unconditional Latent Class Analysis.....	58
Table 7. Latent Class Regression Results for the Effects of Covariates on Latent Class Membership for Class 2 (SBWS)	61
Table 8. Latent Class Regression Results for the Effects of Covariates, Depressive Symptoms, and Latent Class Membership on Number of Depressive Symptoms	63
Table 9. Latent Class Regression Results for the Effects of Covariates, Depressive Symptoms, and Latent Class Membership on Endorsement of 30-day Depression and Anxiety	65
Table 10. Strong Black Woman Characteristics and Related NSAL measures.....	82
Table 11. Model Fit Indices for Exploratory Latent Class Analysis Using African American Woman Sample (N=1443)	85
Table 12. Model Fit Indices for Exploratory Latent Class Analysis Using Caribbean Black and White Woman Sample (N=832)	85

Table 13. Model Classification Diagnostics for the Three-Class Unconditional Latent Class Analysis ($E_3=.629$) for Full Sample.....	86
Table 14. Model Classification Diagnostics for the Four-Class Unconditional Latent Class Analysis ($E_4=.705$) for Full Sample.....	86

LIST OF FIGURES

Figure 1. Conceptual Framework for Strong Black Woman Construct..... 26

Figure 2. Conceptual Model of Strong Black Woman Schema within the Stress Process
Framework 29

Figure 3. Path diagram for SBWS Latent Class Regression..... 40

Figure 4. Observed Factor Structure of the Strong Black Woman Schema 54

LIST OF ABBREVIATIONS

Confirmatory Factor Analysis	CFA
Strong Black Woman Schema	SBWS
Super Woman Schema	SWS
Bolck, Croon, and Hagedaars	BCH

1 INTRODUCTION

Depression and anxiety are common and serious mental health concerns (Brown and Keith 2003:31; González et al. 2010; McKenna et al. 2005). Depression is a significant source of morbidity and lost productivity (González et al. 2010; McKenna et al. 2005; Williams et al. 2007). Depression is a cause of continuing concern, as it is projected to be a leading cause of disability in the next two decades (Williams et al. 2007). Anxiety is the most common mental disorder among US adults and is most prevalent among women (Kessler et al., 2005; Mclean et al., 2011). For Blacks in the United States who do experience mental disorder, depression and anxiety are more persistent and severe when compared with Whites, indicating a greater burden within this subgroup of the population (Williams et al. 2007).

Black women occupy multiple oppressed statuses within society which place them at an increased risk for depression and anxiety. Black women are more likely to be poor, unmarried, single mothers, and have one or more chronic diseases. These conditions expose Black women to a wide range of stressors (Brown and Keith 2003; Holden et al. 2012, 2014). With this increased risk for mental disorder, Black women tend to report better mental health than expected. In fact, Black women tend to report similar or lower rates of mental disorder compared to White women (Kessler RC et al. 2003; Hunter and Schmidt 2010; Williams et al. 2007). But may also report higher levels of depressive symptoms (Abayani-Siewert, Takeuchi, and Pangan 1999; Kessler et al., 2003; Vega and Rumbaut 2003). This unexpected distinction has produced a type of mental health paradox, characterized by high levels of risk for poor mental health, high levels of depressive symptoms, but low levels of mental disorder among Black women (Keyes 2009, 2012).

Historical and current experiences of racism and sexism have shaped the socialization (cultural, racial, and gendered) of Black women. This complex socialization is paired with a variety of resources used by Black women to cope with their social position. These factors may produce a different experience or interpretation of stress, anxiety, and depression among Black women (Jones and Shorter-Gooden 2003; Hunter and Schmidt 2010). There are several potential explanations for the observed mental health outcomes of Black women. These include specific perceptions of depression and mental illness and higher levels of resources, such as resilience, social support, and religiosity/spirituality (Archibald et al. 2013; Banks and Kohn-Wood 2002; Barbee 1992; Holden et al. 2014).

The sociocultural construct of the Strong Black Woman (SBW) may help explain the apparent outcomes in Black women's mental health. The Strong Black Woman has recently grown in notoriety among researchers of Black women's health (Abrams et al. 2014; Beauboeuf-Lafontant 2009; Belgrave et al. 2015; Romero 2000). Research on the Strong Black Woman has explored the historical and cultural contexts that shape the way Black women develop and maintain their identity within an oppressive society. This has resulted in the characterization of the Strong Black Woman as a schema. Beliefs and behaviors have been passed intergenerationally allowing Black women, families, and communities to survive over time. Interestingly, these beliefs and behaviors may contribute to an increased risk of health problems or alternate representations of illness (Beauboeuf-Lafontant 2005; Hamin 2008; Jones and Shorter-Gooden 2003; Romero 2000; Woods-Giscombé 2010).

The Strong Black Woman represents the gendered, racial socialization and internalized representations of strength provided to Black women as they develop their identity (Thomas and King 2007). The Strong Black Woman is what some would consider a superwoman. She is the

provider and caretaker, resistant to vulnerability and dependency. She displays strength while suppressing her emotions. She perseveres and succeeds despite having inadequate resources, and she assumes multiple responsibilities as a member of the community (Abrams et al. 2014, Jones and Shorter-Gooden 2003; Mullings 2002; Woods-Griscombé 2010).

The stress process has often been used to explore the mechanisms contributing to mental health outcomes (e.g. Carr et al. 2013; Pearlin et al. 1981; Turner and Lloyd 1999). These assessments have failed to consider the context in which Black women live and navigate or how this context influences how Black women interpret and react to the world around them. Expansions to the stress process have proposed incorporating intersectionality to further explain the relationship between stress exposure and observed outcomes particularly among marginalized groups (Aneshensel, Phelan, and Bierman 2012; McLeod 2012).

1.1 Purpose of the Study

Through an exploration of the intersection of race, gender, culture and socioeconomic position, as displayed through the Strong Black Woman Schema, this project expands our understanding of the mental health outcomes observed in Black women. I explore how specific views, beliefs and constructions of meaning related to the Strong Black Woman Schema influence the resulting experience of depressive and anxiety symptoms, as well as the endorsement of depression and anxiety. An embodiment of the Strong Black Woman Schema may provide a more comprehensive explanation for observed mental health outcomes. This information can then be used to more adequately address the mental health needs of Black women.

2 LITERATURE REVIEW

2.1 Mental Health and Black Women

Psychological distress checklists (i.e. Center for Epidemiology Studies Depression Scale, The Mood, and Anxiety Questionnaire) are often used in community studies to assess underlying concepts related to mental health symptomology for depression and anxiety (Abayani-Siewert, Takeuchi, and Pangan 1999; Vega and Rumbaut 2003). In studies utilizing such checklists, Black women tend to report more depressive symptoms than their White counterparts (Abayani-Siewert, Takeuchi, and Pangan 1999; Kessler et al., 2003; Vega and Rumbaut 2003). Alternatively, in large-scale, national, epidemiological studies, such as the National Survey for American Life, Black women report equal or lower rates of depression (Abayani-Siewert, Takeuchi, and Pangan 1999; Kessler RC et al. 2003; Vega and Rumbaut 2003).

Black women experience a multitude of stressors including racism, sexism, and general stressors (Woods-Giscombé and Lobel 2008; Keith and Brown 2009). Exposure to discrimination, sexism, poverty, violence, diagnosis of chronic disease, unemployment, low self-esteem, and negative or stressful life events often experienced by Black women are highly related risk factors of depression (Barbee 1992; Das et al. 2006; Holden et al. 2012). These risk factors impact Black women across multiple aspects of their lives (e.g. home, work, leisure), and across social class and marital status. These intersecting risk factors result in a collection of diverse contributors on experiences of depression (Holden et al. 2012, 2014).

With such a heightened risk for mental illness, it remains unclear why Black women report a lower prevalence of mental illness in the United States. Could this be an example of

what has been termed “Black Girl Magic”? Could the lower prevalence of depression and mental illness reflect the ability of Black women to rise above all obstacles, to be resilient and to exude excellence? Furthermore, how can this be supported when Black women also tend to experience greater persistence and severity of mental illness when they do experience depression or anxiety (Williams et al. 2007)?

Explanations for why these differences occur across studies are varied. There is some discussion that psychological distress scales measure qualitatively different phenomena than psychiatric disorder measures. There is also criticism that diagnostic measures reflect Eurocentric features that fail to capture alternative expressions of mental illness (Vega and Rumbaut 1991). When considering Black Americans several alternative presentations of depression, including “the stoic believer,” “the angry/evil one,” the “John Henry doer” and the “sisterella complex” have been postulated as a more accurate reflection of the experience of Black Americans (Baker 2001; Jones and Shorter-Gooden 2003).

Other explanations for the low prevalence of depression include religious beliefs, community ties, reliance on social support networks, and the myriad coping strategies used by Black women that serve to protect their mental health (Gilmore, Osho, and Heads 2013; Holden et al. 2012; Keith and Brown 2009). These explanations have primarily relied on analyses which do not fully consider the underlying sociocultural factors, systems, and beliefs which influence how Black women evaluate and react to circumstances. Some scholars have incorporated the perspectives of Black women into the discourse of depression outcomes, identifying discrepancies between expectations of Black women, how they feel, and what they deem appropriate responses to stressful circumstances (Beauboeuf-Lafontant 2007; Waite and Killian 2009).

The diversity of Black women presents another challenge to understanding Black women's experiences of stress and mental illness. The Black population of the United States comprises a collection of ethnicities and nationalities which are often lumped together as a single group without consideration of nationality, country of origin, or language. Many studies that lump together all Blacks in a sample do not account for this within-group heterogeneity.

Studies which have extended analyses to consider the diversity of Blacks in the U.S. observed notable differences in the prevalence and severity of mental illness between African Americans and Caribbean Blacks (Williams 2007). Generally speaking, US-born and foreign born Caribbean Blacks tend to report even better mental health (i.e fewer symptoms and less disorder) compared with African Americans and non-Hispanic Whites (Ali and Toner 2001; Gibbs 2013).

2.2 The Strong Black Woman

In order to understand how integral the image of the Strong Black Woman is to Black women in the United States, it is necessary to consider the historical and social contexts which gave rise to the Strong Black Woman schema. In this section, I highlight the historical origins and contexts which have shaped and driven the salience of the Strong Black Woman schema. I also discuss research efforts which have sought to identify the survival characteristics of the Strong Black Woman (SBW). Finally, I outline the identified characteristics of the SBW.

2.2.1 *Historical and Social Context of the Strong Black Woman*

“Black females in this country are born into the army of Fierce Angels, and they have no choice in the matter. Membership is required, and the expectations placed on them are completely universal; *all* black women are supposed to be strong and selfless. Generations of people—black, White, and just about everybody else—have been raised with the underlying assumption that black women will save them.”

Sheri Parks 2010: *xiv*

Black women in the US have lived within a historical legacy of racial or gender stereotyping and oppression (Woods-Giscombé 2010). The beliefs and behaviors associated with the Strong Black Woman are a lasting relic of slavery. They exist in response to the conditions of slavery, allowing Black women to cope with the atrocities of enslavement (Beauboeuf-Lafontant 2009; Harris-Perry 2010).

These beliefs and behaviors have been carried from generation to generation as conditions have changed, but the need to cope with oppression, discrimination, disappointment, abuse, and misuse has persisted (Beauboeuf-Lafontant 2007; Thomas, Witherspoon, and Speight 2004; Woods-Griscombé 2010). Over time, an idealized image of the Strong Black Woman has become an alternative to the many negative controlling images or stereotypes of Black women—the Mammy, the Jezebel, and the Sapphire (Abrams et al. 2014; Harris-Perry 2010; Collins 2008).

There are several primary contextual factors which Cheryl Woods-Giscombé (2010) argues contribute to the characteristics of the Strong Black Woman. These contextual factors include: a historical legacy of racial or gender stereotyping and oppression, lessons from foremothers—intergenerational transmission of behaviors and beliefs— and a history of disappointment, mistreatment or abuse, and spiritual values (Woods-Griscombé 2010).

Behaviors foundational to the Strong Black Woman have roots in West African cultural traditions before chattel slavery (Green-Goode 2011). Within West African culture, the most significant role for women was mother. This significance of the mothering role placed an importance on qualities related to being nurturing and serving as a caretaker (Rodgers-Rose 1980; Thompson 2003; Graham 2013; Green-Goode 2011). Within these early communities,

women were able to have a sense of independence. They often worked outside of the home selling crafts and textiles, keeping their profits for themselves. They were also active in the community by serving in social and political positions (Graham 2013; Green-Goode 2011). Women were not reliant on their husbands to take care of them, and they could live in egalitarian households. Under these conditions, Black women developed and gained a sense of independence, and self-salience, as well as behaviors associated with caretaking and nurturing that they carried into their enslavement (Green-Goode 2011; Thompson 2003).

Under the yoke of slave masters, Black women suffered physical and psychological abuses related to their lack of control, mistreatment, and oppression (Graham 2013). They were expected to perform as much work as men regardless of their condition (i.e. pregnant or injured). At this time, they were considered as Zora Neale Hurston described “mules uh da world” because they appeared to display “superhuman-like strength” under deplorable conditions (Graham 2013; Parks 2010). Expected to take on everything thrown at them, they were used as workhorses and seen as vessels of strength.

In their positions as care-takers and wet nurses for the children and families of the slave master, they put the needs of others – notably the slave owners – above their own. They also endured physical and sexual abuses at the hands of their slave owners due to this close contact (Davis 1981; Graham 2013; Green-Goode 2011; Hamin 2008Thompson 2003; Harris-Perry 2010). Under these conditions, Black women were denied their femininity; they were unable exhibit frailty and were not allowed to express their emotions. This inability to show weakness forced them to learn to suppress their emotions, developing a “façade to mask their true feelings” of fear, anger, or sadness (Green-Goode 2011; Davis 1981).

The atrocities of slavery also included the destruction of Black families. As Black Women witnessed the ties of their families torn apart, with their husbands and children sold to other plantations or worse, they turned to their sense of self-reliance and independence. Black women had to take care of themselves because there was no one else who could. Men were not available to serve as the backbone of the family or to protect them. Black women further relied on their skills of caretaking and nurturing behaviors to help each other salvage the effects of these broken families. To further bolster the unnatural emotional and physical strength they required, Black women also looked to their faith and religion to cope with the hardships they faced.

Black women relied on this set of behaviors emphasizing self-reliance, self-sacrifice, care-taking and looking towards religion for strength to cope with their experiences, and passed on these beliefs and associated behaviors from generation to generation. Skills and characteristics, passed inter-generationally, helped to maintain the survival of the Black community and preserve Black families. The characteristics of the Strong Black Woman became part of how Black women socialized their daughters. Over time, this continued transmission of traits and behaviors has contributed to a type of resilience and has aided in the preservation of the self, Black families, and the Black community (Woods-Giscombé 2010).

2.2.2 Gendered Racial Socialization and Controlling Images

Within the Black community, cultural socialization often serves to combat the marginalized status Black people hold within society and counter negative images of Black people (Beauboeuf-Lafontant 2005, 2007; Keith and Brown 2009). Black women receive gendered racial socialization from their mothers to prepare them for future experiences of racism and sexism (Abrams et al. 2014; Thomas and King 2007). Gendered racial socialization

promotes a variety of messages such as strength, resilience, assertiveness, self-pride, self-determination, the importance of spirituality and religion, independence, and caretaking (Belgrave et al. 2015; Thomas and King 2007).

Black women grow up with the cultural beliefs that they have to show strength continuously, that they should embrace multiple roles, and that religion and family are of great importance (Beauboeuf-Lafontant 2005, 2007; Waite and Killian 2008, 2009; Williams 2009; Abrams et al. 2014). Across generations, socialization messages have also changed to emphasize different beliefs and behaviors as conditions have changed. Because of these shifts across generations, certain characteristics and beliefs such as the importance of religion may vary between grandmothers, mothers and daughters (Abrams et al. 2014; Thomas and King 2007).

The cultural beliefs associated with the Strong Black Woman support positive features of Black womanhood. This image counters societal messages of inferiority, weakness, and laziness represented in various incarnations of the negative controlling images. The Mammy, Jezebel, and Sapphire images appear after slavery and continue to appear particularly across entertainment media of television, film, and music (Collins 2008; Harris-Perry 2010; Thomas et al. 2004; Williams 2009). Following slavery, this trifecta of negative controlling images based on misrepresentations of Black women has been accepted and used to perpetuate stereotypes and prejudice against Black women.

The Mammy represents a non-threatening matriarchal figure representative of the caretaking qualities of Black women (Collins 2008; Harris-Perry 2010; Thomas et al. 2004). She is the faithful, obedient servant who cares for the White family at the expense of her own. The Jezebel is the “promiscuous temptress” who is always provocative and carries an animalistic

sexual desire (Collins 2008; Harris-Perry 2010; Thomas et al. 2004). Finally, the Sapphire represents the loud, uncouth, emasculating Black woman who is aggressive and assertive. The Sapphire may also be considered the Angry Black Woman. These images are rooted in the experience of Black women during slavery and continue to be used to define how Black women live within society (Collins 2008; Graham 2013; Harris-Perry 2010).

Black women are trained to embody strength and selflessness beginning in childhood (Beauboeuf-Lafontant 2007; Abrams et al. 2014). Black women are often taught to believe they must be superwomen. They must always be strong, take on multiple roles and ensure the health and well-being of others often neglecting their health (Beauboeuf-Lafontant 2007; Keith and Brown 2009; Williams 2009; Woods-Giscombé 2010). These qualities are thought enable them to deal with the adversities associated with being a Black woman in society (Beauboeuf-Lafontant 2007). Unfortunately, these qualities may also be creating a wall of solitude, leading Black women to believe they are unable to share their true feelings of stress, wear, and burden.

Beauboeuf-Lafontant (2007) observed that among working and middle-class Black women the concept of strength was part of a larger structure that supported the use of denial, isolation and unhealthy behaviors (i.e. overeating, drinking, shopping) to cope with daily demands. Additionally, the concept of struggle was deemed a primary part of being a Black woman. Struggle became an anticipated obstacle which women were expected to overcome (Beauboeuf-Lafontant 2007). It is beliefs such as these that may contribute to an altered appraisal of stress, unexpected reaction to stressors, and unexpected mental health outcomes.

2.2.3 History of Disappointment, Mistreatment, and Abuse

Black women have also experienced a collective history of disappointment, mistreatment, and abuse. Sources of this foul treatment, following slavery, are found in the families and other relationships of Black women. Black men were often absent from Black households for various reasons. When Black men were present in the household, they were often unable to be reliable sources of support for Black women due to restrictions and racial biases preventing adequate employment. Because of these issues, Black women continued to be self-reliant and maintained the need to be in control of their lives. Paired with this male absence, many Black women also learned to mistrust Black men due to experiences of physical and sexual abuse by fathers and other male family figures. These actions also contributed to the need for Black women to rely on themselves and live separately from Black men.

In these instances, Black women also accepted the need to occupy multiple roles developing both traditionally feminine and masculine (or androgynous) gender role beliefs. This resulting independence led to the development of strained interpersonal relationships for Black women, most notably in romantic relationships, where Black women no longer subscribed to traditional American views of marriage. Black women began to see marriage as unimportant and their conditions often supported singleness and single parenthood arrangements for survival.

Throughout US history, Black women have endured several oppressive societal arrangements and historical hardships that have shaped how they interpret and react to their circumstances. Through gendered racial socialization, Black women are trained to develop some adaptations and beliefs that increase resilience (Abrams et al. 2014). Furthermore, these adaptations also influence how Black women develop individual interpretations of circumstances as stressful and what symptoms are of concern for mental distress (Abrams et al. 2014;

Beauboeuf-Lafontant 2005, 2007; Holden et al. 2015.; Thoits 2006, 2013; Waite and Killian 2008, 2009).

Alternatively, images of strength, selflessness, or resilience that aid Black women may also increase their risk for mental disorder. They discourage Black women from recognizing or accepting symptoms of depression. Rather, they encourage Black women to appraise their stressors as persistent and necessary pieces of the struggle of being a Black woman and to hide their true feelings (Beauboeuf-Lafontant 2005, 2007). This may result in black women being less likely to report experiencing symptoms related to mental disorder.

One example of the problems associated with images of strength includes efforts to meet the expectations of others to be a strong Black woman. In these cases, some women may hide their true feelings of despair, fear or anxiety, putting on an act of strength so that they do not appear as weak (Beauboeuf-Lafontant 2007; Williams 2009). These collective adaptations may serve as an explanation for the differing results across studies examining disorder versus symptomatology, and the apparent paradox in mental health symptoms.

2.2.4 Conceptualization of the Strong Black Woman

Multiple attempts have provided an avenue to define and conceptualize the Strong Black Woman. These classifications include the Strong Black Woman Identity (Shorter-Gooden and Washington 1996), the icon of the Strong Black Woman (Romero 2000), the Sojourner Truth Syndrome (Mullings 2002, 2005), Shifting and the Sisterella Complex (Jones and Shorter-Gooden 2003), the Strong Black Woman Attitudes Scale (Thompson 2003), the Stereotypic Roles for Black Women Scale (Thomas, Witherspoon, and Speight 2004), the Strong Black Woman Cultural Construct (Hamin 2008), the Superwoman Schema (Woods-Griscombé 2010),

and the Strong Black Woman Collective (Davis 2015). All of these conceptualizations are related and convergent; spanning the ever-evolving understanding of the concept. The Strong Black Woman is an identity, image, ideal, construct, performance, collective schema, a cultural coping mechanism, and a stressor.

Looking at the Strong Black Woman Identity, Shorter-Gooden, and Washington (1996) found strength to be a central part of Black women's identity, as well as having a strong sense of self, and the ability to deal with adversity. Additionally, they determined the Strong Black Woman identity serves as an important coping mechanism and was key to the "self-definition and survival" for Black women (Shorter-Gooden and Washington 1996). They also observed connections of Black women's religious identity to their racial identity, which is central to the identity of Black women.

These observations suggest that for Black women, their identity as Strong Black Women is partially defined by their race and by their faith. Based on the findings of Shorter-Gooden and Washington (1996) the Strong Black Woman is a central piece of Black Women's identity, grounded in strength and resilience, and supported by religion and racial identity. The Strong Black Woman also serves as a key coping mechanism.

Romero (2000) establishes a framework for the Strong Black Woman. According to Romero (2000) the Strong Black Woman encompasses a collection of five characteristics. Through interviews and clinical research Romero determined that the Strong Black Woman: a) feels an obligation to manifest strength; b) feels an obligation to suppress emotions; c) resists being vulnerable or dependent; d) is determined to succeed, despite limited resources, and e) feels an obligation to help others. Romero (2000) also argues that the Strong Black Woman is an

iconic image tied to the identity of Black women and is internalized. She collapses these five characteristics into two major themes from her research: 1) Nurturing and caretaking—Strong Black Women seek to nurture and preserve family and 2) Strength—Strong Black Women have a strong sense of self, emotional resilience, and can deal with the adversities of associated with being a Black woman.

These two themes represent the most salient characteristics of the Strong Black Woman. Strength, again, is integral to the Strong Black Woman and is further elaborated as possessing emotional, personal, and internal strength and having the resilience to persevere. Caretaking and nurturing are important roles in the lives of Black Women. While a set of characteristics were identified representing the Strong Black Woman, Romero (2000) argues that this collection of characteristics is representative of two primary factors—the internal strength, and tenacity of Black women and their roles as nurturers and caretakers within their families and communities.

Further conceptualization of the Strong Black Woman image continued with the development of the Superwoman Schema by Cheryl Woods-Giscombé (2010). Using the themes identified by Romero (2000) as an initial framework, Woods-Giscombé (2010) pushed the evolution of the Strong Black Woman construct into a schema, resulting in a multidimensional framework. This updated framework outlines the characteristics, contextual influences, beliefs and limitations of the Strong Black Woman construct. The updated framework also creates an avenue for improved understanding and measurement of the concept as an influence on stress for Black women. Items discussed in this framework include consideration of the characteristics of the Strong Black Woman as identified by Romero, the contextual factors contributing to the Strong Black Woman role, the perceived benefits, and the perceived liabilities of the Strong Black Woman. While Woods-Giscombé (2010) does not alter the characteristics of the Strong

Black Woman identified by Romero (2000), she does place the five characteristics within a larger framework by outlining the larger historical and social context in which the Strong Black Woman exists. She also adds that the Strong Black Woman serves to provide a set of benefits as well as potential problems. The Strong Black Woman construct is both a gift and a curse. A coping mechanism which can both help and harm Black women.

Mullings (2002, 2005) presents an alternative discussion of the Strong Black Woman through her Sojourner Truth Syndrome (STS). The STS serves as an intersectional framework which accounts for the interactive influences of race, gender, and class. Mullings describes the STS as a personification of Black women's' experience of racism, sexism, and classism serving as a representative measure of the intersectional experience of Black women. Mullings (2002, 2005) describes STS as a 'survival strategy' that Black women have used to maintain the African American community through oppression.

As described with the STS, Black women have an economic, community and household responsibility wherein they take care of the family, serve as heads of households, and engage in community empowerment and work outside of the home. Black women engage in these actions within difficult conditions and despite limited resources (Mullings 2002). Within this framework, Black women tend to struggle with the contradiction of the unrealistic ideal of the Strong Black Woman and their reality, highlighting holes in the presumably positive construct.

The Sojourner Truth Syndrome is similar to and inspired by the concept of John Henryism, a form of active coping, and represents a gendered version of John Henryism that has short and long-term consequences on the health of Black women (Mullings 2002, 2005). While not directly describing STS as the Strong Black Woman, Mullings' STS may be seen as an

alternative term for the Strong Black Woman construct. Similarities in the concepts appear in the characteristics Mullings notes. Caretaking and nurturing responsibilities, an expanded description of responsibilities/obligations beyond the family including the community, and working through struggle/difficulties with limited resources reported across other studies of the construct (i.e., Romero 2000; Woods-Giscombè 2010). Considering the Strong Black Woman within the discussion of the STS by Mullings (2002, 2005), there is additional support for the Strong Black Woman as a coping mechanism which Black women use for survival. This support involves the obligation to care for a wide range of individuals both within and outside of the family.

Further elaborating upon the Strong Black Woman construct, Jones and Shorter-Gooden (2003) developed the term “shifting” as an alternative description of this processes of coping used by Black Women that encompasses the Strong Black Woman characteristics. Using data from surveys and in-depth interviews, Jones and Shorter-Gooden (2003) describe shifting as a coping mechanism that has allowed Black women to survive within society. Black women hide their true selves and feelings, and alter their outward behaviors, attitudes, and tone, to accommodate the gender, class, or ethnic differences of individuals with whom they interact. Thus, Black women ‘shift’ depending upon the needs of the situation and group that they encounter (Jones and Shorter-Gooden 2003).

As part of their understanding of shifting, Jones and Shorter-Gooden (2003) also determine that shifting becomes an ineffective coping strategy for Black women who often internalize the many myths, stereotypes, and discrimination they encounter throughout their lives. The conceptual framework for shifting does not address the racist and sexist experiences of Black women. Jones and Shorter-Gooden (2003) also coined the term ‘Sisterella Complex’ as

part of this process. The Sisterella Complex, they argue, is an alternate expression of depression within Black women that occurs as a result of the process of shifting.

Jones and Shorter-Gooden (2003) reference the previously discussed characteristics of the Strong Black Woman in describing the Sisterella Complex. They describe the Sisterella Complex as including a focus on selflessness, overachieving, working hard, quietly suffering due to internalization of emotions, and showing a face of strength. Jones and Shorter-Gooden recognize that strength, suppressing or internalizing emotions and helping others as part of their discussion of shifting; finding that these behaviors and beliefs contribute to a form of depression. They also argue that the physical performance of these characteristics is more often an alternative presentation of depression that is unique to Black women (Jones and Shorter-Gooden 2003). Thus, in the case of Black women, embodying characteristics of the Strong Black Woman may also be reflective of an overlooked experience of depression. Alternatively it may also serve as a way to hide experiences of depression to maintain an identity. In either case, these conclusions suggest that the Strong Black Woman and related beliefs and behaviors influence how or if Black women present symptoms related to depression.

Black women engage in the maintaining/policing the Strong Black Woman image. Davis (2014) argues that the construction of strength, a major piece of the Strong Black Woman construct, is policed and maintained through communication (Davis 2014). Davis (2014) notes four observations in regards to the policing of strength. First, Black women communicate strength through shared communicative practices. Second, the assemblance of Black women communicating strength composes the Strong Black Woman Collective. Third, members of the Strong Black Woman Collective participate in the collective by reinforcing each other's virtues of strength. Finally, communication patterns of strength enable the Strong Black Woman

Collective to confront and retreat from oppressive structures outside and impede vulnerability and emotionality within the collective. Thus, in the view of Davis (2014), strength is a feature reinforced among groups of Black women through their communication behaviors and in response to the oppressive conditions they face.

Since the Strong Black Woman is a representation or culmination of the intersectional experience of racism and sexism for Black women, Davis (2014) determined that communication is an extension of the Strong Black Woman performance. Davis also determined that communication, language, and relationships with friends serve as important components to maintaining a performance of strength in Black women.

Across these qualitative studies, there is a clear distinction that the Strong Black Woman construct encompasses a variety of characteristics that include strength, caretaking, selflessness, faith, and perseverance in adversity and the like. Furthermore, there is some determination that these characteristics play a role in the experience and expression of stress and mental illness among Black women but these observations are only anecdotal. Quantitative analyses that confirm these qualitative findings and theoretical framing have been very limited and produced mixed results. Ultimately, it is clear across each of these conceptualizations that the Strong Black Woman construct is a multidimensional and multifaceted phenomenon. Strength, caretaking, and regulating emotions anchor the Strong Black Woman but may be influenced and altered by other factors. Furthermore, these altered dimensions may also contribute to differences in the experience of stress or altered expressions of mental illness.

2.2.5 Measurement of the Strong Black Woman Schema

To quantitatively measure and assess the influence of the Strong Black Woman construct on the lives of Black Women, Thompson (2003) developed the Strong Black Woman Attitudes Scale using the two major themes and findings observed by Romero (2000). Unlike Romero's two-factor model of strength and caretaking, a factor analysis revealed a three-factor structure for the Strong Black Woman Attitudes Scale encompassing self-reliance, affect regulation, and caretaking. This three-factor scale structure supports the importance of independence/individual strength, and caretaking as part of the Strong Black Woman construct and adds regulating or suppressing emotions as an important and separate component of the construct.

Thompson's results also revealed that among a sample of 219 Black and White women, there were no significant differences in the endorsement of Strong Black Woman Attitudes Scale scores between Black and White women (Thompson 2003). These results suggest there may be some issues in identifying Strong Black Women attitudes as a uniquely cultural phenomenon or that there are problems in the measurement of the construct/question development with the use of questions that are not reflective of a unique cultural experience. Thompson (2003) also noted mixed results for the psychometric properties of the scale, suggesting the need for additional adjustments and refinements to improve the scale for future use.

Hamin (2008) revised Thompsons' Strong Black Woman Attitudes Scale by making changes to improve the language and make a better attempt at measuring a more uniquely African American concept/set of coping behaviors. The resulting product was the Strong Black Woman Cultural Construct (Hamin 2008). Hamin's (2008) assessment of this revised scale revealed connections of the Strong Black Woman construct to measures of racial centrality and confirmed a three-factor model of the concept reflecting the characteristics of self-reliance,

caretaking, and affect regulation, as identified by Thompson (2003). These results confirm a connection of the construct to the cultural context and racial identity/pride in which Black women use the coping behaviors associated with Strong Black Woman. Hamin (2008) also finds support for the measure of the Strong Black Woman construct as a general scale and as three distinct subscales. Hamin (2008) also highlights continued issues regarding internal consistency within the three subscales.

With the Stereotypic Roles for Black Women Scale (SRBWS), Thomas, Witherspoon, and Speight (2004) explore multiple identity factors related to the three main stereotypes used to characterize Black women –the Mammy, Jezebel, and Sapphire—as well as the additional stereotypical image of the Superwoman/Strong Black Woman. In this case, instead of solely measuring the Strong Black Woman construct, the SRBWS scale also incorporated measures of other stereotypical images of Black women and determined which image women most identify with. Within this characterization, the Superwoman/Strong Black Woman stereotype included items of strength, resilience, and self-sufficiency, showing a façade of high self-esteem and avoiding anger. The displayed façades used by Black women hide feelings of anger, fear, shame, and loneliness as well as issues with anxiety and low self-esteem (Thomas et al. 2004).

In an attempt to reconcile the converging and diverging elements of all of these conceptualizations, namely the Superwoman Schema, Sisterella Complex, and the Sojourner Truth Syndrome, Abrams and colleagues (2014) conducted a focus group study (n= 44) with a diverse sample of Black women. Through the focus groups, Abrams and colleagues (2014), produced a revised and expanded collection of characteristics describing the Strong Black Woman. Abrams and colleagues update the characteristics of a Strong Black Woman to include: a) embodiment and display of multiple forms of strength; b) possession of self and ethnic pride

despite intersectional oppression; c) embracing being an ‘everywoman’ (i.e. selflessness, caretaking, nurturing in home and community); and d) anchored by religion and spirituality (Abrams et. al., 2014). This updated framework further elaborates on each characteristic of the Strong Black Woman as identified through previous research and provides a platform to measure the construct comprehensively.

Strength remains a core and defining characteristic of the Strong Black Woman, serving as a complex and multidimensional trait that is displayed or internalized in several ways (Abrams et, al. 2014). Abrams and colleagues (2014) determine that strength is displayed in multiple forms including obligatory and volitional independence, learned and compulsory resilience, and matriarchal leadership. Through this collection of traits representing strength, Abrams, and colleagues (2014) propose that the dominant theme of strength within the Strong Black Woman construct is in actuality a collection of strengths as opposed to an all-encompassing, single characteristic.

Black women may have multiple forms of strength which they display depending upon the needs or demands of their situation. For example, there are the internal/self-related expressions of strength (volitional independence; resilience) used to maintain and develop their identity and overcome challenges. Alternatively, the external/other related expressions of strength (obligatory independence; resilience; matriarchal leadership) are used to demonstrate leadership or take care of and help others in the home, church or community (Abrams et. al. 2014). This wider range of expressed strengths displayed by Black women are more explicitly defined within this revised framework suggesting the need for a multidimensional measure of strength in assessments of the Strong Black Woman construct.

Also unlike some other conceptualizations of the Strong Black Woman construct, Abrams et al. (2014) point out the importance of possessing self-pride or ethnic pride in the face of intersectional oppression in the form of racism and sexism. As part of this characteristic, Black women display pride through confidence in themselves and their abilities without the need for external validation (Abrams et al. 2014). Therefore, a woman endorsing this Strong Black Woman characteristic will have a positive self-concept and engage in an emotional evaluation of herself that is dependent upon her views as opposed to the view of others.

With this characteristic, Abrams and colleagues also assert that beliefs associated with this characteristic are reflective of Black women's desires to only have an identity as a Black woman regardless of their social position (SES, marital status, age). Thus, the Strong Black Woman can come from a variety of backgrounds and is reflected in the manner that Black women walk, talk, and act (Abrams et al. 2014). The ideal image serves as a marker of Black femininity to which many Black women aspire and compare themselves. A Strong Black Woman strongly identifies with her ethnic background contributing to enhanced emotional resilience (Abrams et al. 2014). These assertions support the results observed by Hamlin (2003) with the connection of the Strong Black Woman Cultural Construct to racial centrality views.

Revising the conceptualization of the caretaker and emotional regulation aspects of the Strong Black Woman characteristics, Abrams and colleagues (2014) also propose that Black women instead embrace the need to be "Everywoman." Within this characteristic, black women give of themselves self-sacrificially, engaging in multiple roles both in the home and in the church and community. Thus, Black women actively take on the roles of caretaker, provider, and/or homemaker, going above and beyond their duties to meet the needs of those around them. As part of this process of being an "everywoman" Black women deny their own needs. This

denial results in a sort of “cognitive dissonance” between their multiple roles towards others and their own needs (Beaubeauf-Lafontant 2009, Woods-Giscombe 2010).

Finally, Abrams and colleagues argue that religion and spirituality serve as integral anchors to the Strong Black Woman and work across all other identified themes/characteristics to empower Black women and allow them to maintain this Strong Black Woman identity. It is through faith and spirituality that Black women find themselves able to maintain their strength, collect strength as their demands increase, and gain additional support. This faith may also ‘mitigate the cognitive dissonance’ produced through the multiple roles that Black women often hold (Abrams et al. 2014).

Through this reconceptualization, Abrams and colleagues (2014) assert that the Strong Black Woman Schema is multifaceted, multidimensional and represented in several forms. It is unclear, however, how many alternate forms may manifest in regard to the Strong Black Woman Schema and how these different forms may appear. Adding to this expanded characterization of the Strong Black Woman construct, this study will use Abrams et al. expanded conceptualization as a foundation for this analysis.

Prior qualitative and quantitative research shows that there are several conceptualizations of the Strong Black Woman construct. Though these conceptualizations differ from one another, they also include several convergent aspects. Ultimately, it is clear across each of these conceptualizations that the Strong Black Woman Schema is a multidimensional and multifaceted phenomenon. Strength, caretaking, and regulating emotions, anchor the Strong Black Woman but may be influenced and altered by other factors. Furthermore, these altered dimensions may also contribute to differences in the experience of stress or altered expressions of mental illness.

The Strong Black Woman serves as an achieved identity from which Black women embody a variety of characteristics, beliefs and behaviors to cope with their marginalized position within society. Across studies, the embodiment or internalization of the Strong Black Woman image is both a gift and a curse. Unfortunately, quantitative measures currently available to measure the Strong Black Woman construct still have room for improvement and may be better conceptualized as a collection of psychosocial resources or the interaction of several psychosocial resources collectively and simultaneously used by Black women. Research seeking to determine the influence of the Strong Black Woman construct upon the stress experienced by Black women as well as the mental health outcomes related to this stress may also benefit from a shift of view of the construct as a continuously scaled item to a construct that represents several distinct forms. Based on my review of the quantitative and qualitative literature, I hypothesize that there are five distinct core dimensions comprised of strength, ethnic/racial pride within oppression, being “Everywoman”/having an obligation to help others, Religion/spiritual anchor, and suppression of emotion (Figure 1).

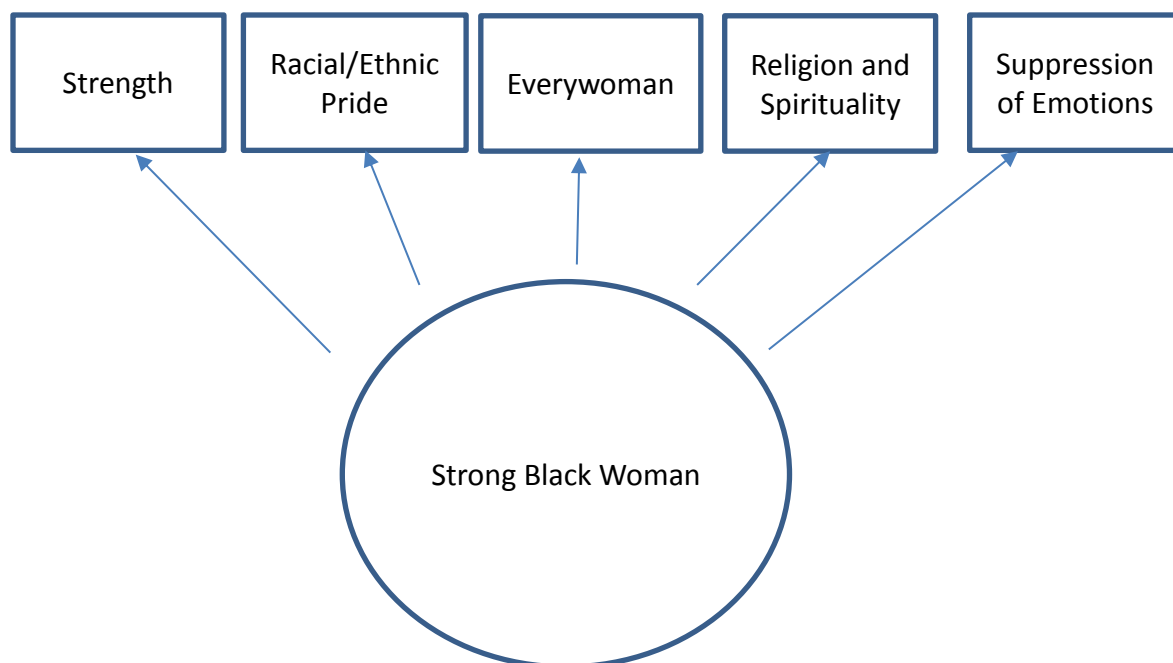


Figure 1. Conceptual Framework for Strong Black Woman Construct

2.2.6 Strong Black Woman Schema within a Stress Process Framework

The stress process has been widely used to explain the role of social stressors in the development of psychological distress and mental illness (McLeod 2012) and to explain the presence of disparities in mental health (Perry et al 2013; Turner and Lloyd 1999, Turner et al 2004). Comprised of three core components—stressors, mediators/moderators, and mental health outcomes—as well as the antecedents to these core components (social and economic statuses of individuals), the stress process has greatly contributed to the sociological study and understanding of stress and mental health. While this model has been useful for the past three decades, there still continues to be a considerable body of work that remains uncharted in our understanding of stress and mental health (Pearlin and Bierman 2013). Notably, the influence of culture, beliefs and related attributions of meaning are potentially major factors that are part of the stress process that have been largely unexplored (Ward and Heidrich 2009).

With the observed limitations to previous applications of the stress process, some expansions have been proposed to enhance the utility of the framework and further elucidate the mechanisms involved in the stress process across diverse groups (Pearlin and Bierman 2013). One such expansion is the incorporation of intersectionality theory (McLeod 2012, 2013). Intersectionality theory provides a theoretical and methodological approach to exploring inequalities, explain the complex and interconnected mechanisms involved, and allow for the inclusion of often overlooked standpoints of disadvantaged social locations (Choo and Ferree 2010; Crenshaw 1991). It serves as a foundation to analyze and understand the influence of cultural factors and the perspectives of Black women that may impact the presence or absence of experiences of depression and anxiety.

Under this application, mental health outcomes in Black women may be explained considering the contexts in which they live, as well as the cultural, racial and gendered beliefs or behaviors that are part of their socialization. These factors may influence their experience or reporting of depressive outcomes and appraisals of stress and aid in a greater understanding of this stress process among Black women (McLeod 2012). There have, unfortunately, been few applications of intersectionality theory towards an explanation for the outcomes of depression or anxiety using the stress process. Difficulties have also been noted for this application. The best ways to measure or incorporate intersectionality quantitatively within the stress process have resulted in limitations in effectively applying the concept (Choo and Ferree 2010).

Expanding on the current work by elucidating the influence of the Strong Black Woman construct on the health and mental health of Black women, may provide a more effective explanation of the paradox of mental health in Black women. Additionally this work will expand the current understanding of the stress process by addressing the shortcomings of the theory

through an application of intersectionality theory. Including the Strong Black Woman construct will allow for the incorporation of the perspectives and historical context of Black women within a larger web of cultural beliefs and values.

The Strong Black Woman considered within the stress process framework— as an expansion and application of intersectionality theory—may be viewed as a set of mediators and moderators that influence the relationship between the stresses experienced by Black women and their reports of mental illness or distress (Figure 2). The Strong Black Woman construct fits within a wider framework, so there are several factors associated with the construct that may influence its endorsement among Black women as well as be influenced by said endorsement including a variety of sociodemographic influences, and mental health outcomes. In this section, I outline the major observations of the Strong Black Woman construct in relation to sociodemographic antecedents/covariates, and mental health outcomes within the frame of the stress process. I also present a revised framework for this analysis.

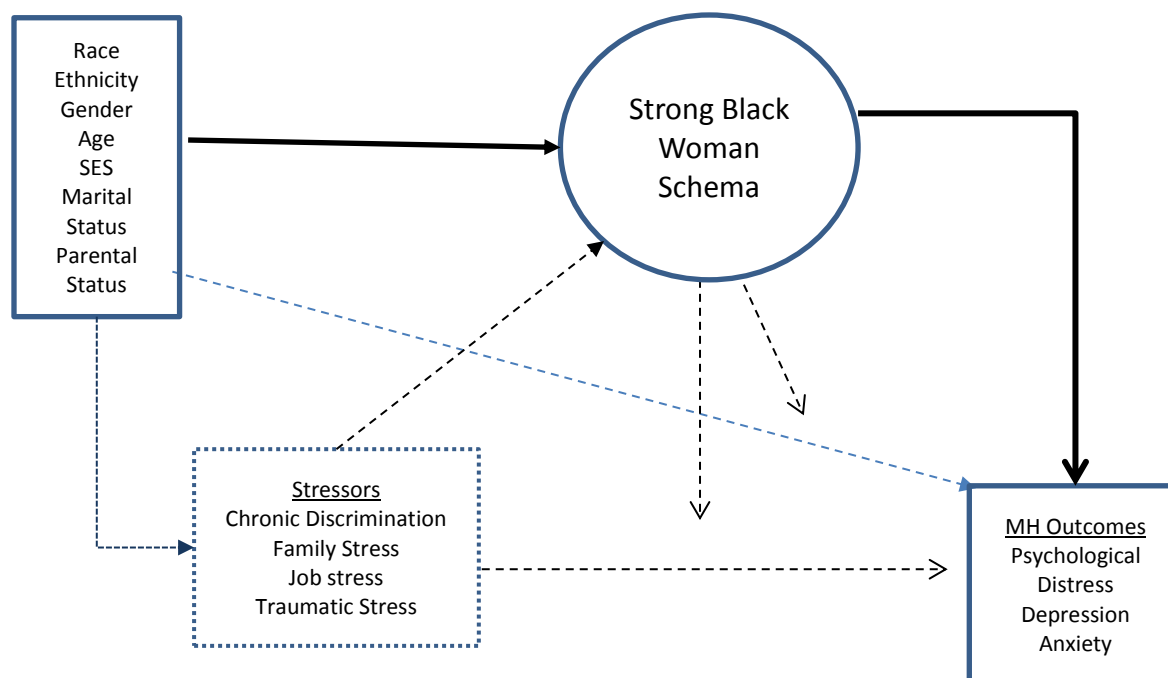


Figure 2. Conceptual Model of Strong Black Woman Schema within the Stress Process Framework

2.2.6.1 Sociodemographic factors

Across studies seeking to explore the influence of the Strong Black Woman construct on the lived experiences of Black women some notable observations have been made about sociodemographic factors. The most notable of these factors are age and socioeconomic status. Qualitative studies suggest that these factors influence endorsements of the Strong Black Woman construct and shape the way that this construct interacts with the experience of stress, reactions to stressors, and alter mental health. While not directly discussed, current literature suggests endorsements of the Strong Black Woman are influenced by marital status or parental status. Marital status and parental status provide additional dimensions for stress and support that may contribute to how Black women view or incorporate certain characteristics of the Strong Black woman within their lives.

2.2.6.2 *Age*

As Black women progress through the life course, their views about the Strong Black Woman image may change. During childhood through young adulthood, Black women engage in modeling behaviors and take on a general acceptance of the Strong Black Woman image (Beauboeuf-Lafontant 2007). Black girls and young women then try to achieve the noted ideal image that they have and focus on maintaining and showing strength at all times. During late adolescence, Black women begin to use the Strong Black Woman image begins as a coping mechanism to buffer or mediate against experiences of racism and sexism that young Black women begin to understand and process as encounters. They may also see or interpret strength within the context of an absent male figure – i.e. Father, husband— (Abrams et al. 2014).

During early middle adulthood, approximately 30 years of age or older, that Black women begin to critique their feelings of the ideal Strong Black Woman image that they have been striving to embody (Beauboeuf-Lafontant 2005). It is during this time that some Black women may begin to go from an embodiment of strength—muting self, internalizing emotions, or being superhuman, to that of Boldness—being expressive, helpful, human, and venting emotions (Beauboeuf-Lafontant 2005). At this point in their lives, Black Women develop a clear sense of self and a solid identity as a Black woman. They have an acceptance of their feelings and begin to consider their well-being within the network of all of the others that they provide care. Black women begin to redefine their identification with the ideal Strong Black Woman image and produce their definition of the Strong Black Woman.

This shifting view of the Strong Black Woman continues to evolve as Black women grow older and more mature. Older Black women are more likely to place a stronger connection to the Strong Black Woman image with their spirituality and faith than younger women (Abrams

2014). Thus, the concept of the Strong Black Woman may vary with age. Individual conceptions of the Strong Black Woman can change throughout the life course resulting in shifting endorsements of combinations of the identified characteristics. Furthermore, as conditions in society change the collection of resources that Black women use to cope with their conditions may be shifted, adding to differing conceptions of the Strong Black Woman along the lines of a cohort effect.

As Black women age their views, understanding and endorsement of the various characteristics associated with the Strong Black Woman image evolve and change although there is clear agreement on the characteristics that comprise the Strong Black Woman image (Abrams et al. 2014). These shifting views suggest that there may be different typologies of the Strong Black Woman construct. The typologies may appear across age groups with younger women more closely tied to the ideal image, middle adult Black women tied to an altered ‘boldness’ form of the Strong Black Woman image, and older Black women tied to a more religious/spiritually rooted Strong Black Woman image. These differing views and endorsements may reflect the changes in the view of the Strong Black Woman. They may also reflect the shifting connections to the Strong Black Woman image that each successive generation has for the construct as well as a differential influence of the Strong Black Woman construct on stress and mental health outcomes. I propose that there will be a relationship between the Strong Black Woman Schema determined by age.

2.2.6.3 Socioeconomic Status

Another factor that may influence endorsements of the Strong Black Woman construct is socioeconomic status. Differences in the endorsement of SBW characteristics are observed by social class (Thompson 2003; Hamin 2008). In Thompson’s (2003) validation study of the

Strong Black Woman Attitudes Scale, women within the middle-class group presented different definitions of the Strong Black Woman construct than women who were in the working-class group. Focus group responses revealed that Black women in the middle-class group believed the Strong Black Woman to be a rare phenomenon among Black women while the lower income women believed that they encountered Strong Black Woman often (Abrams 2014). Middle-class women also tended to hold more negative views of the Strong Black Woman than the working-class women in the study (Abrams et al. 2014). These differing views may be reflective of different socialization messages in connection with the Strong Black Woman ideal between middle and lower class Black women as well as the related stressors and appropriate responses associated with living within each social position.

Lower class women may be more apt to buy into the Strong Black Woman ideal due to the greater hardships and independence they are more likely to experience. They may be more likely to hold multiple roles and responsibilities such as the head of household, mother, and provider without available assistance from a significant other or family. The lives of lower class women may place them in a position that is more aligned and reflective of the continued conditions that led to the development of the Strong Black Woman image. Thus, social class may serve as an additional intersecting oppression represented within the Strong Black Woman construct that contributes to alternate expressions of the concept. Based on the observed connections to social class, I propose that, among women in the current study, Lower/working class women will be more likely to endorse characteristics reflective of the ideal Strong Black Woman, highly endorsing most or all characteristics.

2.2.6.4 Marital Status

Expectations related to the Strong Black Women and reported on the actions of Black women are observed within the qualitative literature. As part of the struggles that Black women are expected to endure within the Strong Black Woman context, Black women have reported that they were to stay committed to abusive or cheating husbands as a display of their strength (Beauboeuf-Lafontant 2007). The embodiment of strength is maintaining a marriage (Beauboeuf-Lafontant 2007). In such situations, women may engage in a suppression of emotions and failure to seek additional assistance as needed either financially or emotionally from family or friends (Beauboeuf-Lafontant 2007). Therefore, in the case of marital status, I seek to determine what type of relationship exists between marital status and endorsement of the Strong Black Woman construct.

2.2.6.5 Parental Status

Parental status is an important role reflective of the caretaking aspect of the Strong Black Woman. As previously discussed, Black women are expected to take on a caretaking role within their families, taking care of their children and other family members as well as being active in similar capacities within their church and communities. Beauboeuf-Lafontant (2007) also noted that for both middle and working class women, difficulties surrounding acceptance of and contributing to dissonance with the Strong Black Woman are found among women who were viewed as or viewed themselves as caretakers particularly among those who were among childbearing/childrearing age (20-40s). Since parental status is something that is reflective of one of the major aspects of the Strong Black Woman construct, but expectations related to the status also serve to produce some source of stress and discord, I propose that parental status is negatively associated with endorsement of an ideal Strong Black Woman typology.

2.2.6.6 Religion/Spirituality

Another factor that is influential as a part of the Strong Black Woman construct is religion and spirituality, but there is some disconnect on what kind of role religious beliefs contribute to the Strong Black Woman construct. Abrams et al. (2014) argue that religion and spirituality should be at the core of the Strong Black Woman construct, but the connection to this key and influential practice as a distinct factor has been absent within measures of the Strong Black Woman construct. Qualitative analyses of the role of religion and spirituality in the lives of Black women note that it serves as a basis or support for the perpetuation of strength and provides Black women the ability to carry on (Beauboeuf-Lafontant 2005; Romero 2000; Woods-Giscombé 2010).

2.2.7 Strong Black Woman and Mental Health

Several scholars have explored the relationship between the Strong Black Woman and various mental health outcomes including depressive symptoms, symptoms of anxiety, general well-being, and self-esteem. Results from these studies have found very mixed results. Some support a positive relationship between the Strong Black Woman identity and mental health outcomes (Green-Goode 2011). While others find no relationship (Donovan and West 2014; Offutt 2013). For example, in their study of the superwoman/Strong Black Woman stereotype, Thomas, Witherspoon and Speight (2004) found that connection to the Strong Black Woman stereotype is negatively correlated with self-esteem. Others have observed a positive association with the Strong Black Woman image to suicide (Green-Goode 2011), and no relationship to anxious symptoms (Donovan and West 2014). Most research including mental health outcomes has focused primarily on depressive symptoms or depression as outcomes. Few studies have explored the relationship of the Strong Black Woman construct to anxiety.

2.2.7.1 The Strong Black Woman and Depression

Quantitative explorations of the relationship between the Strong Black Woman image and depression generally observe positive associations with measures of the Strong Black Woman construct and depressive outcomes. However, these results observe also depend on the Strong Black Woman measure used. Using the Stereotypic Roles for Black Women Scale, Cartwright, and Hunter (n.d.) observed a positive association between Strong Black Woman ideology and anhedonic depression. Green-Goode (2011) also observed a positive association between Strong Black Woman ideology and depressive symptoms using the SRBW Scale. Results in Green-Good's (2011) study showed that higher endorsements of Strong Black Woman ideology reflected greater reports of depressive symptoms and that higher levels of affect regulation also predicted higher levels of depressive symptoms.

Alternatively, Donovan and West (2014) observed no association with depression using the same scale. Offutt (2013) also observed no relationship between Strong Black Woman ideology and depression using the Strong Black Woman Cultural Construct total score but did observe a significant but weak, positive association with the Strong Black Woman Cultural Construct subscale of affect regulation and depression. These mixed results suggest that observed associations may be dependent upon the type of measure used; highlighting problems in the way that Strong Black Woman ideology has been captured and conceptualized.

Narratives of Black women from qualitative and clinical samples, including those who have experienced depression reveal many deep-rooted cultural messages that contribute to silenced voices and feelings, delayed treatment, and unacknowledged symptoms for depression (Beauboeuf-Lafontant 2007; Holden et al. 2015.; Waite and Killian 2008, 2009; Williams 2009).

The Strong Black Woman image serves as a type of barrier to Black women recognizing depression, accepting a diagnosis and seeking treatment.

In her discussion of depression within the Black community, Terrie Williams (2009:1-57) highlights several controlling images of Black women. These images, (including the “Strong Black Woman”, the “Angry Black Woman”), behaviors common to Black women related to maintaining a “False Face”, placing “Others before self”, having to “keep problems a secret”, “running without help” continuing to function through life without a lot of help, self-medicating, and self-hate due to skin color related to internalized racism all influence the experience of depression in Black women. These images and sentiments are also observed across some qualitative studies (Holden et al. 2015.; Beauboeuf-Lafontant 2007; Waite and Killian 2008, 2009) exploring depression and the perceptions of Black women.

In a multi-site study exploring perceptions of Black women towards contributors to depression, focus group participants noted the top factors as a lack of control, difficult relationships, multiple social roles, chronic stressors and poor personal well-being (Holden et al. 2015). Across all sites, the women expressed beliefs that Black women experience depression differently than White women and stressed similar themes as described by Williams (2009) within the Black community surrounding depression. Another notable factor is the discussion of the denial of depression and the inability to be able to show weakness or vulnerability due to the multiple roles they held especially in the community. Stigma towards mental illness in the Black community and the belief that they should be able to handle their problems on their own also serve as important contributors (Holden et al. 2015).

When views about depression are assessed across sites, perceptions differed depending upon socioeconomic status, and other demographic features, such as marital status (Holden et. al 2015). Cultural and social messages of Black women also produce a different and potentially harmful marker of what is “normal” for mental health. This altered normal may be representative of what Jones and Shorter-Gooden (2003) coined as the Sisterella Complex. These messages can contribute to discrepancies in understanding, acknowledging or identifying depression among these women, leading to delayed treatment, and discrepancies in diagnosis.

In qualitative studies conducted by Waite and Killian (2008, 2009) and Beauboeuf-Lafontant (2007), similar findings are observed. These scholars question the benefits of strength and resilience often used to explain the better mental health outcomes among Black women. Among low-income Black women, Waite and Killian (2008, 2009) observed a tendency to look to social networks for meaning and appropriate strategies to manage or navigate their circumstances. While few studies have incorporated the perspectives of Black women to enhance our understanding of depression within this subgroup of the population, notable findings have been observed.

The socialized images, beliefs, and behaviors related to the Strong Black Woman construct clearly influence how Black women view depression and respond to the circumstances that place them at greater risk for depression. Additionally, these studies have also found that there are some discrepancies between the views of Black women and social expectations that impact their reports and expressions of symptoms. The perspectives of these women are observed to differ across age and socioeconomic status, supporting the need for continued study across these stratifications.

While quantitative studies have observed more mixed findings on the relationship between the Strong Black Woman and depression, qualitative explorations show anecdotal connections with the construct and acceptance or presentation of symptoms of depression. Considering these observations, I assert, within the current study, Black women who have higher endorsements of the Strong Black Woman schema will have higher rates of depressive symptoms. Additionally, Black women with high endorsements of the Strong Black Woman will also be less likely to have an endorsement of depression.

2.2.7.2 The Strong Black Woman and Anxiety

Studies exploring the role of the Strong Black Woman on anxiety are limited (Donovan and West 2014). Among the few available studies results are mixed. Watson and Hunter (2015) determined that endorsement of the Strong Black Woman schema is positively associated with anxiety. Black women who supported the beliefs and behaviors related to the Strong Black Woman tended to report higher levels of anxiety symptoms. Qualitative studies of the Strong Black Woman construct provide some support for this observation (Beauboeuf-Lafontant 2005, 2009). Alternatively, in their study of Strong Black Woman, Donovan and West (2014) observed no significant correlation between Strong Black Woman endorsement and anxious symptoms and that Strong Black Woman endorsement did not serve as a moderator between stress and anxious symptoms. Although these are mixed results, I hypothesize that high endorsements of the Strong Black Woman construct is associated with a diagnostic endorsement of any type of anxiety.

2.2.8 Aims of this Study

Currently available measures to quantitatively assess the influence of Strong Black Woman ideology on various aspects of health, mental health, and well-being, are limited. Studies

have lacked a nationally representative sample or used small samples primarily relying on academic/college students with limited variability by SES, age, marital or another social status. Therefore, these studies have not been generalizable to the larger population or truly reflective of the diverse experiences of Black women. Furthermore, prior studies have had some questionable validity, appearing as more general measures that are not necessarily measuring a phenomenon unique to Black women. These current measures are possibly more reflective of a gendered experience or identity (i.e. superwoman) as opposed to the interaction of race and gender.

The observed lack of solid quantitative support suggests the need for more comprehensive applications of the concept in relation to various mental health outcomes such as depression and anxiety. This study proposes to address the previous limitations and extend the current body of literature by examining the influence of the Strong Black Woman Schema on mental health, incorporating religion as a core factor within the Schema measure. I also seek to determine the presence of ethnic diversity in the endorsement of the construct between African Americans and Caribbean Black by identifying distinct typologies representative of the diverse views and endorsements of the Strong Black Woman and explore the influence of the Strong Black Woman on clinical diagnostic endorsements of anxiety within a nationally representative sample of African American and Caribbean Black women. Results from this study may provide insights into better understanding the occurrence of depression and anxiety as they manifest in Black women and possibly provide explanations for the mental health paradox that appears across mental health research.

I assess the following questions to using a revised conceptual framework (Figure 3) pulling a portion of the stress process framework to begin to explore how the Strong Black Woman construct may explain the mental health observed for Black women.

1. Is a compilation of psychosocial resources an appropriate measure of the Strong Black Woman Schema?
2. What sociodemographic factors influence distinct typologies reflective of at least one uniquely Black form of the Strong Black Woman Schema?
3. Does the Strong Black Woman Schema influence depressive symptoms, depression, and anxiety?

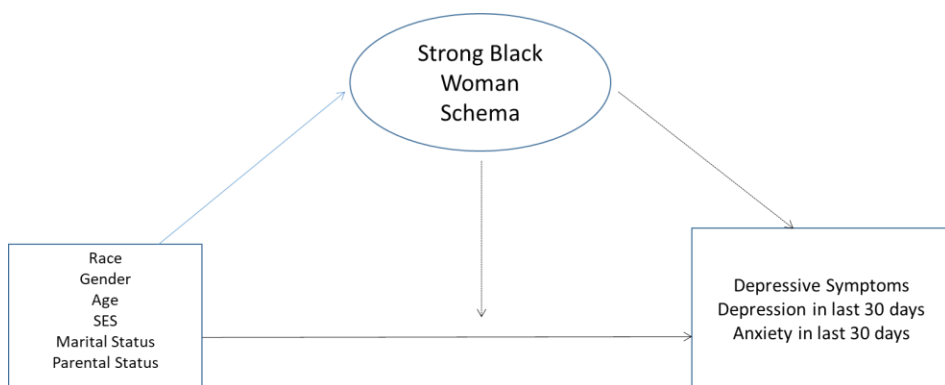


Figure 3. Path diagram for SBWS Latent Class Regression

3 METHODS

3.1 Study Sample

The data for this study comes from the National Survey of American Life (NSAL). The NSAL is one of the most comprehensive explorations of the mental health of African American, Caribbean Black and White Americans (Jackson, Neighbors et al. 2004; Jackson, Torres et al. 2004) and provides a nationally representative sample of African Americans and Caribbean Blacks. Within this sample, African Americans are individuals who self-identified as Black and did not report Caribbean ancestry, and Caribbean Blacks are individuals who self-identified as Black with West-Indian or Caribbean ancestry (Heeringa et al. 2004).

The NSAL used a national multi-stage household probability method for sampling, with a population that excluded institutionalized individuals, individuals not in the contiguous United States, military base residents and individuals unable to complete the survey interview in English (Heeringa et al. 2004). Core sample participants were identified within 64 primary sampling units based on the size of the Black population or through modified probability sampling (Chae et al. 2012; Jackson et al. 2012). Secondary sampling units were identified through probabilities proportionate to the number of Black households in the 1990 US Census. An additional sampling supplement for the Caribbean sample was derived from an oversampling of geographic areas with at least a 10% population of Caribbean origin (Jackson et al. 2012). Responses from the initial survey were captured using a computer-assisted personal interview (CAPI) and resulted in an overall response rate of 71.5%, with a total of 6,082 respondents: 3,570 African Americans, 1,170 Caribbean Blacks, and 891 Whites (Jackson, Caldwell, Torres and Sweetman 2015). A total of 3,796 women were included in this sample (n = 2,299 African American women, n = 978 Caribbean Black women, and n= 519 White women).

Following the initial survey, participants had the option to complete a follow-up self-administered questionnaire, the NSAL Re-interview (RIW). Data from the follow-up survey were collected during February 2001 to June 2003. The RIW included additional items on psychosocial resources, group and individual characteristics, identity, and stressors (Neighbors, Njai and Jackson 2007). The overall response rate for the RIW was 56.6%, with 3,438 respondents from the initial survey completing the follow-up (Jackson et al. 2012). Being female, unemployed, having higher education and completing the original survey after September 11, 2001, were associated with higher response rates for the RIW (Neighbors, Njai, and Jackson 2007).

Sampling weights were included to account for the complex probability sampling and response rates for the sample and to allow results to be nationally representative even when using items from the RIW survey (Jackson et al. 2012). This study uses items from the core cross-sectional data collected between February 2001 and March 2003 and the self-administered data collected between February 2001 and June 2003. For this study, only the responses from African American, Caribbean Black, and White women who completed the core and follow-up survey are included resulting in an analytic sample of approximately 2276 women.

3.2 Measures

Mental Health Outcomes. For this analysis, I analyze dependent variables which include depressive symptoms and depressive and anxiety disorder using DSM endorsements of any form of depression and anxiety in the last 30 days. Depressive Symptoms. I used a 12-item version of the Center for Epidemiology Studies Depression Scale (CESD-12; Radloff 1977) to measure depressive symptoms. Respondents were asked to rate how often they experienced depressive symptoms during the past week. Some example questions include: I felt that I was just as good as

other people, my sleep was restless, and I enjoyed life. Responses ranged from 0 to 3 and summed to produce a range of depressive symptoms from 0-36. The CESD-12 showed moderate reliability within the study sample ($\alpha = .78$).

Measures of mental disorder were captured through the a modified version of the World Mental Health Organization Composite International Diagnostic Interview (CIDI: Pennell et al. 2004) that allows for identification of mental disorders using criteria based on the Diagnostic and Statistical Manual, version 4 (DSM-IV). Depression. Measures for depression include 30 day reports of major depressive disorder, bipolar disorder (I or II), bipolar subthreshold, dysthymia, dysthymia with hierarchy. Anxiety. Measures for anxiety include 30 day reports of general anxiety disorder, general anxiety disorder hierarchy, panic attack, or panic disorder. Items were coded such that endorsement of any disorder =1 and no endorsement = 0.

Strong Black Woman Schema. I argue that the Strong Black Woman Schema is a collection of psychosocial resources used collectively by Black women. I constructed a measure of the Strong Black Woman using items from several psychosocial measures and other attributes within the NSAL dataset that correspond to the identified characteristics of the Strong Black Woman construct. I selected items based on similarity to questions in currently available scales for the Strong Black Woman Construct, closeness to themes identified in qualitative research on the Strong Black Woman, and question wording towards views or perceptions of self. I excluded items which did not connect to themes identified in qualitative studies, questions used in other measures of the Strong Black Woman Construct or were worded in a manner reflective of actions of others as opposed to actions by the respondent. The final set of items included in the analysis are listed in appendix A.

The Strong Black Woman measure uses a total of 56 items from mastery (Perlin and Schooler 1978), self-esteem (Rosenberg 1965), John Henryism (James 2002), individual racial identification and ideology, social resources and interactions, religious coping, religious importance (adapted Multidimensional measurement of religiousness/spirituality: Fetzer Institute/National Institute on Aging 1999), and general coping strategies (Lazarus and Folkman, 1988) (see Table 1). Characteristics representing the multiple factors of the Strong Black Woman in this study are based on the Superwoman Schema (Woods-Giscombé 2010) and the expanded Strong Black Woman Schema (Abrams et al. 2014). These characteristics include strength (multiple forms of strength), ethnic/racial pride, everywoman (obligation to help others), religion/spirituality, and suppression of emotions.

Strength. Strength is a major component of the Strong Black Woman Schema. I measured strength using 16 items that are representative of the ways in which Black women demonstrate strength: internal expressions of strength, external expressions of strength, and determination to succeed with limited resources. I pulled items measuring strength from measures of John Henryism and Mastery, each representing a different form of strength. Questions include: “Sometimes I feel that if anything is going to be done right, I have to do it myself”, “I like doing things other people thought could not be done”, and “I can do just about anything I really set my mind to.” I included 10 of the original 12 items for John Henryism to measure the external aspect of strength. I also included 6 of the 7 original items for Mastery to measure internal representations of strength.

Ethnic/Racial Pride. I used 16 items to measure possession of ethnic/racial pride. I used 10 items from measures of individual social stereotypes, 1 item from mastery, and 5 items from

self-esteem (Rosenberg 1965). Example questions include: “How true about you... proud of yourself” and “I take a positive attitude toward myself”.

Everywoman. To measure selfless obligation to help others, or being an everywoman, I used 14 items related to tangible or emotional support provided to family, friends and church members, social barter work, family provider role and children’s duties to parents. Example items include: “how well does respondent take care of their family”, “Respondent helps church people when ill”, and “How well have you done in taking care of your family’s wants and needs”.

Religion/Spirituality. I measured the use of religion and spirituality as an anchor, especially for strength, using nine items from religious coping, religious guidance, importance of religion and general coping strategies. Items include: “I look to God for strength, support, and guidance”, “Importance of religion in my life” and “Importance of prayer when dealing with stressful situations”.

Suppression of Emotions. To measure the practice of suppressing emotions, I used 3 items, including 1 item from John Henryism, and 2 items from general coping strategies. Example Items include: “I don’t let my personal feelings get in the way of getting the job done”, and “To make problems easier I eat more than I usually do”.

Sociodemographic Covariates. I used several sociodemographic measures to determine further differences in endorsements of the Strong Black Woman and mental health outcomes. These measures include age, socioeconomic status, marital status, parental status, and immigration status. *Age.* To capture shifts in views and different manifestations of the Strong Black Woman Schema as women grow older, I included age as a covariate and measured in years.

Socioeconomic Status. I measured socioeconomic status using several variables, education, employment status, and household income. I measured education in years and recoded to reflect four categories, up to high school (0-11) high school graduate (12), some college (13-15), and college graduate (16+). I also created dummy variables for each education category for use in regression analyses with high school graduate as the reference group. I measured employment status using a three category item with responses of employed, unemployed or not in the labor force. I created dummy variables for each category of employment using the employed category as the reference group. Finally, I measured household income using the dollar amount provided by the respondent top coded at \$200,000. I then created an adjusted household income measure with income transformed to a natural log (ln) of one plus income.

Marital Status. I included marital status as a three category collapsed measure with the first category representing individuals who reported being married or cohabitating, the second category representing individuals who reported being divorced, separated, or widowed, and the third category representing individuals who reported to have never been married. I also created dummy variables for each marital status category with married used as the reference group.

Parental Status. I measured parental status using two variables. I combined and dichotomized the variables for number of children in the household and adolescents in the household to reflect having any children in the household or having no children in the household. Additionally, I used an item asking respondents, “Are you a parent” to determine if respondents were a parent or not. Responses were coded as kids in household (1) or no kids in household (0), and parent (1) or non-parent (0).

3.3 Analysis

I conducted bivariate analyses to determine significant differences in study variables across the three racial groups of women included in the sample, African American, Caribbean Black and White. Through a three-part analysis, I addressed the main research questions of this study: 1. Is a compilation of psychosocial measures an appropriate measure of the Strong Black Woman Schema; 2. What sociodemographic factors influence distinct typologies reflective of at least one uniquely black form of the Strong Black Woman Schema; and 3. Does the Strong Black Woman Schema influence depressive symptoms, depression, and anxiety? Each step of the analysis is described below relative to the aim of each research question.

3.3.1 Development and validation of a measure of the Strong Black Woman Schema

First, to establish a measure for the strong Black woman using a compilation of psychosocial resources, I completed a series of confirmatory factor analyses (CFA). I used CFA to confirm the core dimensions of the schema and include as many items as possible to ensure an optimally-inclusive representation of the multidimensional nature of the SBWS. First, I included all items for each respective measure into a single factor CFA to confirm whether all items represented a single factor dimension of the construct. I split measures with poor fitting models identified through the consideration of multiple fit indices as described by Schreiber et al. 2006 (including a Comparative fit index-CFI and Tucker-Lewis index-TLI ≥ 0.95 , a root mean square error of approximation -RMSEA < 0.06 and weighted root mean residual-WRMR < 0.90) into multiple factors based on the original measures included in the representative facet. I excluded measure items from the final measurement model which had factor loadings less than .40.

After identifying well-fitting factor measurement models, I averaged items and converted them into parcels to aid in analysis due to the large number of measure items. Parceling is a

method of combining measurement items by summing or averaging two or more items (Little et al. 2002). Parcels are used instead of the original items as the manifest indicator of the latent construct (Little et al. 2002). Each parcel is representative of the identified factors associated with the characteristics of the Strong Black Woman Schema. Parceling also allows for a decreased likelihood of correlated residuals, dual factor loadings, reduced sources of sampling error, and greatly reduces the number of parameters used to estimate the latent construct (Little et al. 2002)

I then examined a single measurement model including all the developed parcels to confirm that the parcels remained a well-fitting measurement model of the latent construct. After reviewing the distributions of the parcels through a sensitivity analysis, I decided to discretize each parcel by including 1 to 2 cut points to limit additional analysis problems related to the skewed/non-normal variable distributions. I established a cut point for each parcel based on the observed parcel distribution such that half of the identified factors were dichotomized and the other half were divided into 3 categories. I used the final identified discretized parcels as the foundation for the multivariate latent class analysis (LCA) measurement model.

I identified several distinct Strong Woman typologies through a person-centered exploratory LCA. Beginning with the latent class enumeration process (Masyn 2013), I fit eight models with $K=1$ to $K=8$ classes using a split validation method. I first fit the 1 – 8 class model to the sample of African American women and narrowed the model selection to three representative models using absolute fit and relative fit indices, and the observed class separation (Odds ratios $>.5$ or < 0.2) and homogeneity (item probabilities >0.7 or < 0.3). Repeating this process, I fit the same 1-8 class model to the remaining sample of Caribbean Black and White women. Finally, I fit a 1- 8 class model to the full sample and narrowed the model selection to

three representative models using absolute fit and relative fit indices, and the observed class separation and homogeneity (Masyn 2013). I selected a final model from the three representative models and used for the remainder of the analysis considering the informative nature of identified class representative typologies, the size of the classes, model fit, and the overall ability of the model to continue to be stable and identified for the latent class regression.

3.3.2 Sociodemographic influences of the Strong Black Woman Schema and influence on mental health outcomes?

To confirm and address the last two research questions, I completed a latent class regression with distal outcomes analysis following a manual BCH three-step method. I selected this procedure due to the complex nature of the analysis (Asparouhov and Muthen 2014). The BCH method produces a weight that incorporates the measurement error of the latent class variable (Asparouhov and Muthen 2015). This method allowed for the inclusion of several covariates in a predictor model to examine the criterion-related validity of the construct and confirm the separation of the gendered and racialized Strong Black Woman Schema from the solely gendered form of the Superwoman Schema. This second analysis also determines the intersectional influences of gender, race, age, ethnicity and socioeconomic status towards specific representations of the Strong Black Woman Schema. This method also limits shifting of individuals between classes when incorporating the distal outcomes in the final stage model.

The final set of analyses incorporated the weighted BCH values developed from the first step to serve as the latent class variable so that I could distinguish the relationship between the identified Strong Black Woman typologies and depressive symptoms, endorsement of depression in the last 30 days, and endorsement of anxiety in the last 30 days. I also included centered covariates in this step of the analysis for ease of interpretation. Checks were also conducted to

examine any class shifting between the first and second run for the manual 3-step method. I conducted all analyses Stata 14 (Stata Corp 2015) and MPlus version 7.4 (Muthen and Muthen 2015).

4 RESULTS

4.1 Descriptive Results for Analytic Sample

Weighted descriptive statistics for the women in the sample are reported in Table 1. Among women in the combined initial and follow-up survey sample the mean age was approximately 43 years ($m = 42.89$, 95%, $CI = 40.72 - 45.06$) with ages ranging from 18 to 90. African American women and Caribbean Black women had greater proportions of women reporting some high school through some college education. White women had a greater proportion of women reporting high school graduate to college graduate or more education. Across all groups, a greater proportion of the women were employed as opposed to unemployed. Caribbean Black women had the highest proportion of women with employment.

Approximately one quarter of African American women and White women (25.5%) reported they were not in the workforce. The average household income reported by the sample was \$37,329.26, with African American women reporting the lowest average household income of \$30,703.06 that was significantly different than Caribbean Black and White women ($F = 11.61$, $p < .01$; $F = 6.67$, $p < .05$, respectively) Caribbean Black women and White women did not significantly differ in reported household income. A greater proportion of White women reported that they were married or cohabitating (49%), while a greater proportion of Caribbean Black women reported having kids in the household (65%). Geographically, African-American and White women were more likely to be from the south (59%). Caribbean Blacks were more likely to be from the North (67%). Just over two-thirds of the sample of Caribbean Black women were foreign born.

Among the women in the sample, the average CES-D scores for depressive symptoms reported was 7.922 with reported CES-D scores ranging from 0 to 33 (Table 2). African

American and Caribbean Black women reported significantly lower levels of depressive symptoms as compared to Whites. Caribbean Blacks reported the lowest depressive symptom score ($m = 5.98$, 95% CI = 5.455 – 7.4; $F = 15.71$, $p < .001$). African American women fall in the middle ($m = 7.12$, 95% CI = 6.69 – 7.55; $F = 12.72$, $p < .001$). Whites reported the highest average score for depressive symptoms ($m = 8.90$, SD = 95% CI = 8.12 – 9.69). For endorsements of depression and anxiety, there were no significant differences across race/ethnicity, but African American women showed a slightly higher proportion of endorsement of any form of depression and any form of anxiety in the last 30 days than White women or Caribbean Blacks.

Table 1. Summary Descriptive Statistics by Race/Ethnicity (weighted)

	Total Sample		African American	Caribbean Black	White
	N	Mean/ Proportion	Mean/ Proportion	Mean/ Proportion	Mean/ Proportion
Age	2276	42.89	42.51	42.64	43.29
Education***	2273				
0-11 years		.1966	.2503	.2516	.1376
12 years		.3333	.3729	.3132	.2944
13-15 years		.2599	.2491	.2703	.2703
≥ 16 years		.2102	.1278	.1675	.2977
Employment Status*	2722				
Employed		.6660	.6319	.7603	.6937
Unemployed		.0874	.1150	.0901	.0874
Not in Labor Force		.2466	.2531	.1496	.2475
Household Income*	2276	37329.26	30703.06	40912.73	43819.86
Social Class**	2182				
Lower Class		.0550	.0594	.0698	.0550
Lower Middle Class		.2510	.2958	.2512	.2063
Middle Class		.5355	.5004	.5811	.5671
Upper Middle Class		.1364	.1097	.0844	.1670
Upper Class		.0222	.0348	.0135	.0102
Marital Status**	2273				
Married/Cohabiting		.4178	.3444	.438	.4914
Div./Sep./Widowed		.3124	.3204	.2941	.3057
Never Married		.2698	.3352	.2679	.2029

	N	Total Sample	African American	Caribbean Black	White
		Mean/ Proportion	Mean/ Proportion	Mean/ Proportion	Mean/ Proportion
Parental Status	2221				
Non-Parent*		.2449	.1812	.2134	.3118
Parent		.7551	.8188	.7866	.6882
	2273				
No Kids in HH**		.4946	.5011	.6513	.5695
Kids in HH		.5054	.4989	.3487	.4305
Region***	2273				
North		.1776	.1391	.6674	.1790
Midwest		.1350	.1989	.0422	.0769
South		.5491	.5881	.2270	.5345
West		.1383	.0739	.0634	.2098
Immigrant Status***	2249				
Us Born		.8673	.9945	.3064	.9953
Foreign Born		.1327	.0055	.6936	.0047

NOTE: * group differences are significant at $p < .05$ level; **group differences are significant at $p < .01$ level; *** group differences are significant at $p < .001$ level

Table 2. Average Depressive Symptom Score and Proportion of 30-day Depression and 30-day Anxiety Endorsement

	N	Total Sample	African American	Caribbean Black	White
CESD-12***	2177	7.922	7.12	5.98	8.90
Depression 30-days	2276	.0597	.0652	.0435	.0554
Anxiety 30-days	2276	.0645	.0763	.0246	.0555

NOTE: * group differences are significant at $p < .05$ level; **group differences are significant at $p < .01$ level; *** group differences are significant at $p < .001$ level

4.2 Development of the Strong Black Woman Schema

I determined an eight-factor structure model within five domains (Figure 4) based on the final models identified through CFA (Table 3). The eight factors included 56 items representing the multidimensional aspects of the five facets of the SBWS - 2 factors of strength (internal and external), 2 factors of racial and ethnic pride, 2 factors for everywoman (community and family) as well as a single factor for religion, and a single factor for emotional suppression.

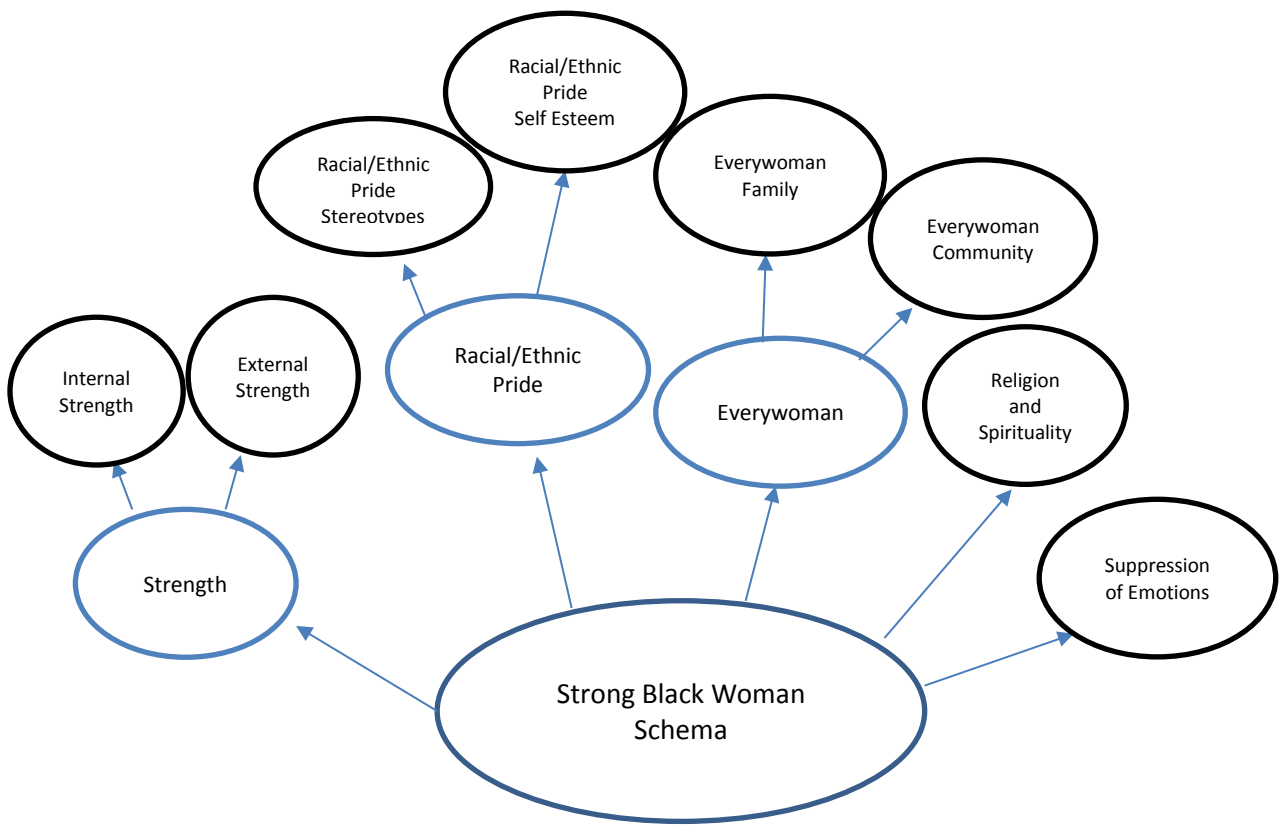


Figure 4. Observed Factor Structure of the Strong Black Woman Schema

Table 3. Confirmatory Factor Analysis Model Results

Factor	χ^2 Model	df	p-value	CFI	RMSEA (90%CI)	WRMR
Strength	201.536	100	<0.001	0.970	0.021 (0.017,0.025)	1.338
Racial/Ethnic Pride	199.625	84	<0.001	0.972	0.025 (0.020,0.029)	0.179
Everywoman	153.592	62	<0.001	0.972	0.025 (0.020,0.031)	1.258
Religion/Spirituality	77.814	25	<0.001	0.991	0.030 (0.023,0.038)	0.898
Emotional Suppression	0.000	0	<0.001	1.000	0.000 (0.00, 0.00)	0.007

I created eight Parcels taking the average of each of the eight factors using the 56 items. A review of the distribution of the parcels revealed a non-normal distribution across multiple factors. To adjust for this distribution, parcels were then discretized based on the observed distribution. I dichotomized the parcels for emotional suppression, racial and ethnic pride (self-esteem and social stereotypes), and external strength since the distributions of these parcels were highly stacked on the highest response average. I created a cut point dividing the responses that averaged below or at and above 3. I also trichotomized the parcels for the remaining factors of religion, internal strength, and everywoman (community and family) since the distributions of these parcels were highly stacked on the middle and highest response average. I created two cut points, one with average responses at or below 2, between 2 and 3, and above 3.

I then completed an exploratory latent class enumeration with the discretized parcels. Of the 1-8 models explored for each sub-sample (see Appendix B) and the full sample, I explored the 2-class, 3-class and 4-class model for further analysis. Based upon the fit indices (lower values) (Table 4), response patterns and proportion of the sample divided within each class

(Table 5), I decided on using the 2-class model in remaining analyses. The 2-class was a better fit than a one class model that represented a single continuous measure.¹

Table 6 provides the model estimated item response probabilities for the two classes and the item response odds ratios. Items with a high degree of class separation (calculated odds ratios $>.5$ or < 0.2) and homogeneity (estimated item probabilities >0.7 or < 0.3) are bolded. Class 1 and 2 have a high degree of separation for emotional suppression, religion, racial and ethnic pride (self-esteem and social stereotypes), and strength (internal and external). The classes are not well distinguishable for each other on endorsements of everywoman (community and family). Class 1 and 2 have high homogeneity with respect to religion, internal strength, and everywoman (community and family) with probabilities higher than 0.7 or lower than 0.3. Class 2 also has high homogeneity for emotional suppression, racial and ethnic pride (self-esteem and social stereotypes) and strength (internal and external).

¹ A four-class model was originally identified as the best fitting model that also identified the greatest amount of variability in the construct, but due to limitations from the sample sizes of some of the classes, and problems in model identification for the regression including the mental health outcomes, the two-class model was determined to adequately address the aims of this study.

Table 4. Model Fit Indices for Exploratory Latent Class Analysis Using Full Sample (N=2275)

Model (k-class)	LL	npar	Model LR χ^2	df	p-value	BIC	CAIC	AWE	LRTS	Adj LMR p-value	BF (K, K+1)	cmP(K)
1	-10091.352	12	5330.139	10605	1	20275.462	20287.46	20404.22	603.722	0.65	<.01	<.01
2	-9786.487	25	5383.84	10605	1	19766.218	19791.22	20034.46	197.414	0.4366	<.01	<.01
3	-9686.798	38	5379.992	10605	1	19667.326	19705.33	20075.06	120.753	0.5921	<.01	<.01
4	-9625.821	51	5381.655	10605	1	19645.858	19696.86	20193.08	111.865	0.7642	<.01	0.0019
5	-9569.332	64	5383.232	10605	1	19633.366	19697.37	20320.07	70.125	0.7659	>10	0.9981
6	-9533.92	77	5354.219	10605	1	19663.03	19740.03	20489.22	57.631	0.8406	>10	<.01
7	-9504.818	90	5366.471	10605	1	19705.312	19795.31	20670.99	56.127	0.8077	>10	<.01
8	-9476.475	103	5365.303	10605	1	19749.113	19852.11	20854.28	--	--	--	<.01

Table 5. Model Classification Diagnostics for the Two-Class Unconditional Latent Class Analysis ($E_2=.55$) for Full Sample

Class k	π_k	95% CI	$mcaP_k$	$AvePP_k$	OCC_k
Class 1	0.35401	(0.136, 0.572)	0.30387	0.860	11.20936
Class 2	0.64599	(0.428, 0.864)	0.69613	0.867	3.572376

Table 6. Model Estimated, Class-Specific Item Response Probabilities and Odds Ratios Based on a Two-Class Unconditional Latent Class Analysis

	$\omega_{m/k}$						OR_{mjk}		
	Class 1- 35.4% SWS			Class 2- 64.6% SBWS			Class 1 vs.2		
	No Endorsement	Endorsement	High Endorsement	No Endorsement	Endorsement	High Endorsement	No Endorsement	Endorsement	High Endorsement
Emotional Suppression	0.36	0.64	--	0.07	0.93*	--	7.13**	0.14**	--
Religion	0.06	0.21	0.74*	0.01	0.06	0.93*	12.03**	3.84	0.20
REP-Self Esteem	0.35	0.65	--	0.00	1.00*	--	5.62**	2.54	--
REP-Social Stereotypes	0.36	0.64	--	0.05	0.95*	--	11.21**	0.09**	--
Strength-External	0.54	0.46	--	0.15	0.85*	--	6.73**	0.15**	--
Strength-Internal	0.19*	0.44	0.37	0.04	0.23	0.73*	5.59**	2.60	0.22
Everywoman- Community	0.53	0.42	0.05*	0.41	0.48	0.12*	1.62	0.81	0.41
Everywoman- Family	0.19	0.64	0.18*	0.05*	0.53	0.42	3.98	1.54	0.31

NOTE: * Item probabilities >.70 or <0.3 are bolded to indicate a high degree of class homogeneity; ** Odds ratios >5 or <0.2 are bolded to indicate a high degree of class separation; SWS= Superwoman Schema, SBWS= Strong Black Woman Schema

Figure 5 shows a stacked bar chart that graphically depicts the class specific probabilities for each response category (no endorsement, endorsement, high endorsement) across the 8 factors. Within the 2-class model, Class 1 is a group of individuals representing approximately 35 percent of the sample. These individuals have the propensity to have a high endorsement of religion/spirituality and no endorsement of either the community and family factors of everywoman. Class 2 is representative of approximately two-thirds of the sample with individuals who have a high propensity to endorse or highly endorse emotional suppression, religion, racial and ethnic pride (self-esteem and social stereotypes), and strength (internal and external). Based upon these initial observations I deemed Class 1 as representative of the Superwoman Schema and Class 2 as the Strong Black Woman Schema and refer to each group as such going forward.



Figure 5. Class Specific Response Probabilities

4.3 Sociodemographic Covariates and Mental Health Outcomes

I conducted a manual three-step latent class regression using the BCH method to identify the relationship between class membership, sociodemographic covariates and mental health outcomes. In the first step of analysis using the manual BCH method, I included the covariates age, parental status employment status, region, race/ethnicity, marital status, immigration status, education and income in a latent class regression model with the discretized parcels representing the 8 factors of the SBWS. The classes remained relatively stable with the inclusion of the covariates and was a significantly better fitting model to the data than the model without covariates (LRTS = 521.68, $df = 15$, $p < 0.001$).

Examining indicators of class membership, Caribbean Black women were 352 percent more likely to be in the SBWS class than in the SWS class as compared to White women (est. = 1.509, SE = 0.738, $p < .05$, OR = 4.521). Women who were unemployed were 55 percent less likely to be in the SBWS class than those in the SWS class as compared to employed women (est. = -0.795, SE = 0.317, $p < .05$, OR = 0.452). Women who were out of the labor force were 47 percent less likely to be in the SBWS class than those in the SWS class as compared to employed women (est. = -0.636, SE = 0.260, $p < .05$, OR = 0.529). Women with less than a high school diploma were 43 percent less likely to be in the SBWS class than those in the SWS as compared to those who were high school graduates (est. = -0.560, SE = 0.240, $p < .05$, OR = 0.571); and women who had completed some college were 74 percent more likely to be in the SBWS class than those who endorsed the SWS as compared to high school graduates (est. = 0.555, SE = 0.229, $p < .05$, OR = 1.742).

Table 7. Latent Class Regression Results for the Effects of Covariates on Latent Class Membership for Class 2 (SBWS)

	Coefficient	Estimate	SE	P-value	OR
SBWS† on	Age	0.014	0.008	0.092	1.014
	Kids in Household	-0.09	0.188	0.633	0.914
	Parent	0.082	0.270	0.761	1.086
	South	0.219	0.229	0.339	1.245
	African American	0.922	0.652	0.157	2.514
	Caribbean Black	1.509	0.738	0.041*	4.521
	Immigrant	-0.474	0.544	0.384	0.623
	Divorced, Separated or Widowed	-0.298	0.241	0.217	0.742
	Single	0.057	0.231	0.804	1.059
	Unemployed	-0.795	0.317	0.012*	0.452
	Out of Labor force	-0.636	0.260	0.014*	0.529
	Less than High School Education	-0.560	0.240	0.020*	0.571
	Some College Education	0.555	0.229	0.016*	1.742
	Graduate Education	0.273	0.333	0.412	1.314
Household Income	0.181	0.096	0.061	1.198	

NOTE: * significant at $p < .05$ level; ** significant at $p < .01$ level; *** significant at $p < .001$ level
†SWS class is reference class

For the second set of analyses using BCH method I ran one model that added the mental health outcome of depressive symptoms, and a second model that included the diagnostic measures of 30-day endorsement of depression and 30-day endorsement of anxiety. For these two models depressive symptoms, 30-day endorsement of depression and 30-day endorsement of anxiety were regressed on class and all of the covariates. Classes remained constant with the inclusion of the outcome variables. For the first model including outcomes, I included depressive symptoms (Table 8). This model was a significantly better fit to the data than the model including the covariates (LRTS = 1459.015, $df = 5$, $p < 0.001$). Individuals in the south as

compared to individuals in other regions, African American women as compared to White women and individuals with some college or graduate study as compared to high school educated women were significantly more likely to report lower depressive symptoms when holding all other variables constant. Overall, there are no significant differences in number of depressive symptoms reported between women who endorse the SBWS and the SWS.

For the final model, I included both 30-day endorsement of depression and anxiety (Table 9). This model was also a better fit to the data than the model including the covariates only (LRTS = 9264.627, $df = 15$, $p < 0.001$). African American women were 2 percent more likely to have a 30-day endorsement of depression as compared to White women controlling for all other variables (est. = 0.020, SE = 0.0087, $p < .05$, OR = 1.020). Divorced, separated or widowed women were 1.1 percent more likely to have a 30-day endorsement of depression compared to married women controlling for all other covariates (est. = 0.011, SE = 0.005, $p < .05$, OR = 1.011). Women who completed graduate or professional study were 1.4 percent more likely to have a 30-day endorsement of depression compared to women with only a high school education controlling for all other variables (est. = -0.014, SE = 0.005, $p < .01$, OR = 1.014). There were no significant direct effects to 30-day endorsements of anxiety with the inclusion of the covariates.

The regression results did show that there is a relationship between class membership and 30-day endorsements of depression. Women who endorse the SBWS were three percent more likely to have a 30-day endorsement of depression as compared to the women who endorse the SWS (est. = 0.030, SE = 0.013, $p < .05$, OR = 1.030). There is no observed relationship between class membership and 30-day endorsements of anxiety.

Table 8. Latent Class Regression Results for the Effects of Covariates, Depressive Symptoms, and Latent Class Membership on Number of Depressive Symptoms

	Coefficient	Estimate	SE	<i>p</i> -value	OR
	Intercept	5.743	0.637	0.000***	0.00
	Age	-0.033	0.021	0.122	0.968
	Kids in Household	0.652	0.592	0.271	1.919
	Parent	-0.677	0.765	0.376	0.508
	South	-1.361	0.574	0.018*	0.256
	African American	-1.860	0.692	0.007**	0.156
	Caribbean Black	-1.008	1.286	0.433	0.365
	Immigrant	-0.224	0.635	0.724	0.799
	Divorced, Separated or Widowed	-0.978	0.584	0.094	0.376
	Single	-1.202	1.286	0.350	0.301
	Unemployed	0.425	0.961	0.658	1.530
	Out of Labor force	1.347	0.982	0.17	3.846
	Less than High School Education	0.068	0.646	0.916	1.070
	Some College Education	-1.199	0.611	0.050*	0.301
	Graduate Education	-1.322	0.632	0.036*	0.267
	Household Income	0.173	0.305	0.572	1.189
SBWS†					
	Age	0.049	0.018	0.006**	1.050
	Kids in Household	0.481	0.533	0.367	1.618
	Parent	0.692	0.525	0.188	1.998
	South	0.708	0.392	0.071	2.030
	African American	2.758	0.526	0.000***	15.768
	Caribbean Black	6.309	2.522	0.012*	549.495
	Immigrant	-3.004	2.327	0.197	0.050
	Divorced, Separated or Widowed	-1.300	0.546	0.017*	0.273
	Single	-0.788	0.502	0.116	0.455
	Unemployed	-1.470	0.614	0.017*	0.230
	Out of Labor force	-0.512	0.364	0.159	0.599
	Less than High School Education	-1.415	0.478	0.003**	0.243
	Some College Education	0.969	0.608	0.111	2.635
	Graduate Education	-0.578	0.547	0.290	0.561
	Household Income	0.016	0.145	0.911	1.016
Depressive Symptoms on SBWS		1.997	1.158	0.084	7.367

NOTE: * significant at $p < .05$ level; ** significant at $p < .01$ level; *** significant at $p < .001$ level

†SWS is reference class

Table 9. Latent Class Regression Results for the Effects of Covariates, Depressive Symptoms, and Latent Class Membership on Endorsement of 30-day Depression and Anxiety

	Coefficient	Estimate	SE	P-value	OR
Depression	Intercept	-0.007	0.022	0.760	0.000
	Age	0.000	0.000	0.778	1.000
	Kids in Household	0.002	0.01	0.848	1.002
	Parent	-0.008	0.01	0.435	0.992
	South	-0.005	0.005	0.314	0.995
	African American	0.02	0.008	0.015*	1.020
	Caribbean Black	-0.028	0.017	0.105	0.972
	Immigrant	0.026	0.033	0.435	1.026
	Divorced, Separated or Widowed	0.011	0.005	0.016*	1.011
	Single	0.009	0.005	0.058	1.009
	Unemployed	0.024	0.03	0.413	1.024
	Out of Labor force	0.01	0.015	0.504	1.010
	Less than High School Education	0.002	0.011	0.865	1.002
	Some College Education	0.005	0.007	0.507	1.005
	Graduate Education	0.014	0.005	0.007**	1.014
	Household Income	0.002	0.001	0.109	1.002
Anxiety	Intercept	0.017	0.061	0.786	0.000
	Age	-0.001	0.001	0.529	0.999
	Kids in Household	0.022	0.015	0.140	1.022
	Parent	0.016	0.014	0.278	1.016
	South	-0.031	0.03	0.313	0.969
	African American	-0.033	0.037	0.367	0.968
	Caribbean Black	-0.023	0.016	0.152	0.977
	Immigrant	-0.02	0.047	0.676	0.980
	Divorced, Separated or Widowed	-0.018	0.022	0.421	0.982
	Single	-0.009	0.022	0.666	0.991
	Unemployed	0.002	0.017	0.892	1.002
	Out of Labor force	0.059	0.045	0.192	1.061
	Less than High School Education	0.003	0.028	0.913	1.003
	Some College Education	-0.025	0.031	0.419	0.975
	Graduate Education	-0.014	0.028	0.631	0.986
	Household Income	0.007	0.006	0.268	1.007

	Coefficient	Estimate	SE	P-value	OR
SBWS† on	Age	0.049	0.018	0.006**	1.050
	Kids in Household	0.773	0.517	0.135	2.166
	Parent	0.494	0.523	0.345	1.639
	South	0.665	0.389	0.087	1.944
	African American	2.738	0.524	0.000***	15.456
	Caribbean Black	6.29	2.514	0.012*	539.153
	Immigrant	-3.016	2.328	0.195	0.049
	Divorced, Separated or Widowed	-1.305	0.545	0.017*	0.271
	Single	-0.718	0.498	0.149	0.488
	Unemployed	-1.472	0.614	0.016*	0.229
	Out of Labor force	-0.488	0.364	0.179	0.614
	Less than High School Education	-1.407	0.471	0.003**	0.245
	Some College Education	1.02	0.611	0.095	2.773
	Graduate Education	-0.595	0.54	0.271	0.552
Household Income	0.024	0.143	0.868	1.024	
Depression on	SBWS	0.030	0.013	0.025*	1.030
Anxiety on	SBWS	0.009	0.047	0.844	1.009

NOTE: * significant at $p < .05$ level; ** significant at $p < .01$ level; *** significant at $p < .001$ level
†SWS is reference class

5 DISCUSSION

This built upon the growing evidence on the Strong Black Woman Schema to develop a quantitative measure of the construct using a compilation of psychosocial resources. This study also explored how the Strong Black Woman Schema influences mental health outcomes in a sample of women in the United States. For my first research question, I determined that a compilation of psychosocial resources could indeed serve as a valid measure for the Strong Black Woman Schema (SBWS). Results of the confirmatory factor analyses supported the five-core dimension structure of the schema as I hypothesized.

This five-dimensional structure combines the core original domains identified in the qualitative foundations of the schema by Romero (2000) and incorporates the updates suggested by Abrams and colleagues (2014). This structure also provides support for religion and spirituality as a core factor of the SBWS and not just a contributing influence. The identification of a total of eight factors within the five domains also provides support for the multidimensional and multifaceted nature of the SBWS. I also provided some confirming evidence for the multidimensional nature of strength as discussed by Abrams et al (2014) with an internal and external measure for the dimension of strength. I was also able to determine that multiple factors could be captured for racial and ethnic pride, and being everywoman highlighting the multidimensional nature of those attributes.

Through the latent class analysis, I identified a potential example of an ideal form of the strong Black woman schema representative of the gendered racial manifestation of the SBWS that was separate than the more gendered form of the Superwoman Schema (SWS). Women who endorsed the Strong Black Woman schema typically highly endorsed all the domains except for everywoman. I was unable to capture a clear distinction in response patterns for the two

factors for being everywoman between women who endorse the Strong Black Woman Schema and the Superwoman schema. This may suggest the need to consider dropping the dimension as a distinctive piece of the SBWS or for further examinations of more adequate measures for the dimension. Alternatively, this dimension may also be an aspect that is moderately important for both constructs.

In response to the second research question on the influence of sociodemographic factors, I did not fully confirm the identified ideal form of the SBWS as a valid measure for all Black women in the sample until the addition of the outcome variables. In the initial validation with the inclusion of the covariates only, being a Caribbean Black woman was a significant predictor of membership in the class endorsing the Strong Black Woman Schema. Like the results of Thompson (2003), I was unable to produce a measure where African American women held a distinct typology for the schema as compared to White women. African American Women within the sample engaged in endorsements of both the Strong Black Woman Schema and Super Woman Schema.

In the full structural model including the mental health outcomes, I determined that African American women and Caribbean Black women were more likely to endorse the SBWS than White women. The absence of a direct effect on being African American and endorsing the SBWS without the inclusion of mental health outcomes suggests the presence of a suppression effect. Endorsement of the SBWS is more important in the context of the health outcomes that Black women, and particularly African American women, face. This also suggests that there is still more to understand about the SBWS in relation to the multiple factors that Black women face.

In response to my third research question, I also found mixed results on the effect of class membership on mental health outcomes. I did not observe a significant relationship between class membership and average number of depressive symptoms or 30-day endorsement of anxiety within the sample. The observed absence of a significant relationship between the average depressive symptoms and the SBWS mimics the results seen among other researchers (i.e. Donovan and West 2014 and Offutt 2013). While, the result was insignificant, the average depressive symptoms reported by women who endorsed the SBWS were higher than those who endorsed the SBWS. I did not find support for the influence of the SBWS endorsement on anxiety but the result is like that observed by Donovan and West (2014).

Interestingly, I did find a significant relationship between class membership and endorsement of 30-day depression that did not follow the expected direction. Women who endorsed the SBWS met the clinical criteria for depression in the last 30-days. I originally proposed that women who endorsed the SBWS would have higher depressive symptoms and be less likely to meet the diagnostic criteria for depression. The results of this study show otherwise.

Considering the intended objective nature of the CIDI and the more subjective nature of the CES-D, women who endorse the SBWS are objectively more likely to be depressed. Their subjective experiences of depression, on the other hand, are not captured by the CES-D. In this model, I also revealed a direct relationship between race and meeting the diagnostic criteria for depression in the last 30 days. As compared to White women, African American women were more likely to meet the diagnostic criteria when controlling for all other covariates in the model and including the classes SBWS and SWS. Thus, the previously observed, non-significant relationship between race and 30-day depression became significant, signaling a suppression effect through this analysis.

5.1 Limitations

There are a few of limitations of note in this study. Although this study used a nationally representative sample and I did use a relatively large data set, the size of the sample proved to limit some of the analyses. Due to issues with distributions of the sample across the variety of variables a 2-class model was chosen for analyses versus a 4-class model which allowed for additional distinctions in observed typologies. While preferred, the 4-class model proved to pull the sample beyond the limits of the data, creating cells of data too small to calculate when including outcomes. This also contributed to limitations towards exploring any mediating influences of the SBWS on the relationship between the covariates and mental health outcomes.

Furthermore, due to the limits of the sample to African American women and Caribbean Blacks, I was not able to fully account for the full diversity within the subpopulation of Black women in the United States. Within the United States, there are also women representing various African nations who do not consider themselves to be the same as Caribbean Blacks or African Americans that are not uniquely represented in this sample even though I included a measure of Immigration Status.

This was a secondary data analysis, the questions used for this analysis were not directly intended for the reasons that I used them. Thus, some of the items used in the development of the SBWS may not be the most appropriate items to include. This may be true for the items used for the dimension of everywoman. Additionally, items used for racial and ethnic pride were not originally conceptualized to capture racial or ethnic pride. Items specific to racial identity were available in the data set, but I chose to use more general measures that were asked of all or most of the individuals within the sample. Many of the questions in the data set that captured validated

measures of racial pride were not asked of the White participants in the study and so were not used in this analysis.

5 CONCLUSION

While the observed results did not fully support all proposed hypotheses, the results from this study also provide a solid foundation for continued research exploring how the compilation of psychosocial resources reflective of the gendered racial socialization of Black women can influence health outcomes. This study provided qualitative insight on the influence of the SBWS to mental health outcomes. This study also added to the limited body of research on the role of the SBWS to experiences of anxiety among Black women. It is clear, compiling psychosocial resources can serve as an adequate measure for the Strong Black Woman Schema. Additional analyses with the 4-class model (not shown) suggest the presence of at least one additional typology for the Strong Black Woman Schema signaling the need for additional research using this measure. This study also leaves room to explore how differences in the endorsement of the SBWS between African American women and Caribbean Black women may help explain the differences in mental health outcomes between these women.

Future research can expound upon the current study and incorporate all aspects of the stress process model. Notably, future researchers could explore how the incorporation of stressors influences the relationship between class membership and mental health outcomes, as well as how stressors may influence class membership. Additionally, this study leaves room for exploration on how the Strong Black Woman Schema also influences physical health outcomes such as high blood pressure, cardiovascular disease and obesity among Black women. Overall this study expands the current body of work and research on the SBWS. The alternate

conceptualization of this construct may be more useful and accessible for continued research of the Strong Black Woman Schema.

REFERENCES

- Abrams, Jasmine A., Morgan Maxwell, Michell Pope, and Faye Z. Belgrave. 2014. "Carrying the World with the Grace of a Lady and the Grit of a Warrior Deepening Our Understanding of the 'Strong Black Woman' Schema." *Psychology of Women Quarterly* 38(4):503–18.
- Aneshensel, Carol S., Jo C. Phelan, and Alex Bierman. 2012. *Handbook of the Sociology of Mental Health*. Springer.
- Archibald, P. C., K. Dobson Sydnor, K. Daniels, and Y. Bronner. 2013. "Explaining African-Americans' Depressive Symptoms: A Stress-Distress and Coping Perspective." *Journal of Health Psychology* 18(3):321–31.
- Asparouhov T. & Muthen B. 2014. Auxiliary variables in mixture modeling: Three-step approaches using Mplus. *Structural Equation Modeling: A Multidisciplinary Journal*, 21: 329-341.
- Baker, F. M. 2001. "Diagnosing Depression in African Americans." *Community mental health journal* 37(1):31–38.
- Banks, Kira Hudson and Laura P. Kohn-Wood. 2002. "Gender, Ethnicity and Depression: Intersectionality in Mental Health Research with African American Women." *African American Research Perspectives* 8(1):174–200.
- Barbee, Evelyn L. 1992. "African American Women and Depression: A Review and Critique of the Literature." *Archives of Psychiatric Nursing* 6(5):257–65.

- Beauboeuf-Lafontant, Tamara. 2003. "Strong And Large Black Women? Exploring Relationships between Deviant Womanhood and Weight." *Gender & Society* 17(1):111–21.
- Beauboeuf-Lafontant, Tamara. 2005. "Keeping Up Appearances, Getting Fed Up: The Embodiment of Strength among African American Women." *Meridians: feminism, race, transnationalism* 5(2):104–23.
- Beauboeuf-Lafontant, Tamara. 2007. "You Have to Show Strength An Exploration of Gender, Race, and Depression." *Gender & Society* 21(1):28–51.
- Beauboeuf-Lafontant, Tamara. 2009. *Behind the Mask of the Strong Black Woman: Voice and the Embodiment of a Costly Performance*. Philadelphia: Temple University Press.
- Belgrave, Faye Z., Jasmine A. Abrams, Kristina B. Hood, Melanie P. Moore, and Anh B. Nguyen. 2015. "Development and Validation of a Preliminary Measure of African American Women's Gender Role Beliefs." *Journal of Black Psychology* 0095798415576614.
- Bolck, Annabel, Marcel Croon, and Jacques Hagenaars. 2004. "Estimating Latent Structure Models with Categorical Variables: One-step versus Three-step Estimators." *Political Analysis* 12:3-27. doi:10.1093/pan/12ph001.
- Brown, Diane R. and Verna M. Keith. 2003. "The Epidemiology of Mental Disorders and Mental Health among African American Women." *In and out of our right minds: The mental health of African American women* 23–59.

- Carr, Erika R., Dawn M. Szymanski, Farah Taha, Lindsey M. West, and Nadine J. Kaslow. 2013. "Understanding the Link Between Multiple Oppressions and Depression Among African American Women The Role of Internalization." *Psychology of Women Quarterly* 0361684313499900.
- Choo, Hae Yeon and Myra Marx Ferree. 2010. "Practicing Intersectionality in Sociological Research: A Critical Analysis of Inclusions, Interactions, and Institutions in the Study of Inequalities*." *Sociological Theory* 28(2):129–49.
- Collins, Patricia. 2008. *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. New York [u.a.: Routledge.
- Crenshaw, Kimberle. 1991. "Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color." *Stanford Law Review* 43(6):1241–99.
- Das, Amar K., Mark Olfson, Henry L. McCurtis, and Myrna M. Weissman. 2006. "Depression in African Americans: Breaking Barriers to Detection and Treatment." *Journal of Family Practice* 55(1):30.
- Gibbs, Jewelle Taylor and Diana Fuery. 1994. "Mental Health and Well-Being of Black Women: Toward Strategies of Empowerment." *American Journal of Community Psychology* 22(4):559–82.
- Gilmore, Adrienne D., G. Solomon Osho, and Angela B. Heads. 2013. "Stress, Anxiety, Depression And Psychological Responses Among African Americans: Empirical Investigation And Coping Strategies." *American Journal of Health Sciences (AJHS)* 4(3):121–30.

González, Hector M. et al. 2010. "Depression Care in the United States: Too Little for Too Few." *Archives of General Psychiatry* 67(1):37–46.

Grollman, Eric Anthony. 2012. "Multiple Forms of Perceived Discrimination and Health among Adolescents and Young Adults." *Journal of health and social behavior* 53(2):199–214.

Grollman, Eric Anthony. 2014. "Multiple Disadvantaged Statuses and Health The Role of Multiple Forms of Discrimination." *Journal of health and social behavior* 55(1):3–19.

Hamin, Dhakirah. 2008. "Strong Black Woman Cultural Construct: Revision and Validation." *Psychology Dissertations*. Retrieved (http://scholarworks.gsu.edu/psych_diss/43).

Heeringa, Steven G. et al. 2004. "Sample Designs and Sampling Methods for the Collaborative Psychiatric Epidemiology Studies (CPES)." *International Journal of Methods in Psychiatric Research* 13(4):221–40.

Holden, Kisha B. et al. 2012. "Psychosocial and Sociocultural Correlates of Depressive Symptoms among Diverse African American Women." *Journal of the National Medical Association* 104(11-12):493–504.

Holden, Kisha B., L. Dianne Bradford, Stephanie P. Hall, and Allyson S. Belton. 2014. "Prevalence and Correlates of Depressive Symptoms and Resiliency among African American Women in a Community-Based Primary Health Care Center." *Journal of Health Care for the Poor and Underserved* 24(4):79–93.

- Jackson, James S., Myriam Torres, et al. 2004. "The National Survey of American Life: A Study of Racial, Ethnic and Cultural Influences on Mental Disorders and Mental Health." *International Journal of Methods in Psychiatric Research* 13(4):196–207.
- Jackson, James S., Harold W. Neighbors, Randolph M. Nesse, Steven J. Trierweiler, and Myriam Torres. 2004. "Methodological Innovations in the National Survey of American Life." *International Journal of Methods in Psychiatric Research* 13(4):289–98.
- Keith, Verna M. and Diane R. Brown. 2009. "African American Women and Mental Well-Being: The Triangulation of Race, Gender, and Socioeconomic Status." in *A Handbook for the Study of Mental Health*. Cambridge University Press. Retrieved (<http://dx.doi.org/10.1017/CBO9780511984945.019>).
- Kessler RC, Berglund P, Demler O, and et al. 2003. "The Epidemiology of Major Depressive Disorder: Results from the National Comorbidity Survey Replication (ncs-R)." *JAMA* 289(23):3095–3105.
- McKenna, Matthew T., Catherine M. Michaud, Christopher J. L. Murray, and James S. Marks. 2005. "Assessing the Burden of Disease in the United States Using Disability-Adjusted Life Years." *American Journal of Preventive Medicine* 28(5):415–23.
- McLeod, Jane D. 2012. "The Meanings of Stress Expanding the Stress Process Model." *Society and Mental Health* 2(3):172–86.
- McLeod, Jane D. 2013. "Social Stratification and Inequality." Pp. 229–53 in *Handbook of the Sociology of Mental Health, Handbooks of Sociology and Social Research*, edited by C.

- S. Aneshensel, J. C. Phelan, and A. Bierman. Springer Netherlands. Retrieved December 8, 2014 (http://link.springer.com/chapter/10.1007/978-94-007-4276-5_12).
- Mouzon, Dawne M. 2013. "Can Family Relationships Explain the Race Paradox in Mental Health?" *Journal of Marriage and Family* 75(2):470–85.
- Pearlin, Leonard I. and Alex Bierman. 2013. "Current Issues and Future Directions in Research into the Stress Process." Pp. 325–40 in *Handbook of the Sociology of Mental Health, Handbooks of Sociology and Social Research*, edited by C. S. Aneshensel, J. C. Phelan, and A. Bierman. Springer Netherlands. Retrieved December 8, 2014 (http://link.springer.com/chapter/10.1007/978-94-007-4276-5_16).
- Pearlin, Leonard I., Elizabeth G. Menaghan, Morton A. Lieberman, and Joseph T. Mullan. 1981. "The Stress Process." *Journal of Health and Social Behavior* 22(4):337–56.
- Pennell, Beth-Ellen et al. 2004. "The Development and Implementation of the National Comorbidity Survey Replication, the National Survey of American Life, and the National Latino and Asian American Survey." *International journal of methods in psychiatric research* 13(4):241–69.
- Romero, Regina E. 2000. "The Icon of the Strong Black Woman: The Paradox of Strength." Pp. 225–38 in *Psychotherapy with African American women: Innovations in psychodynamic perspective and practice*, edited by L. C. Jackson and B. Greene. New York, NY, US: Guilford Press.
- Shorter-Gooden, Kumea and N. Chanell Washington. 1996. "Young, Black, and Female: The Challenge of Weaving an Identity." *Journal of adolescence* 19(5):465–75.

- Thoits, Peggy A. 2006. "Personal Agency in the Stress Process." *Journal of Health and Social Behavior* 47(4):309–23.
- Thoits, Peggy A. 2013. "Self, Identity, Stress, and Mental Health." Pp. 357–77 in *Handbook of the sociology of mental health*. Springer. Retrieved December 19, 2013 (http://link.springer.com/chapter/10.1007/978-94-007-4276-5_18).
- Thomas, Anita Jones and Constance T. King. 2007. "Gendered Racial Socialization of African American Mothers and Daughters." *The Family Journal* 15(2):137–42.
- Thomas, Anita Jones, Karen McCurtis Witherspoon, and Suzette L. Speight. 2004. "Toward the Development of the Stereotypic Roles for Black Women Scale." *Journal of Black Psychology* 30(3):426–42.
- Turner, R. Jay and Donald A. Lloyd. 1999. "The Stress Process and the Social Distribution of Depression." *Journal of Health and Social Behavior* 40(4):374–404.
- Waite, Roberta and Priscilla Killian. 2008. "Health Beliefs About Depression Among African American Women." *Perspectives in Psychiatric Care* 44(3):185–95.
- Waite, Roberta and Priscilla Killian. 2009. "Perspectives About Depression: Explanatory Models Among African-American Women." *Archives of Psychiatric Nursing* 23(4):323–33.
- Ward, Earlise C. and Susan M. Heidrich. 2009. "African American Women's Beliefs About Mental Illness, Stigma, and Preferred Coping Behaviors." *Research in nursing & health* 32(5):480–92.

Williams, David R. et al. 2007. "Prevalence and Distribution of Major Depressive Disorder in African Americans, Caribbean Blacks, and Non-Hispanic Whites: Results from the National Survey of American Life." *Archives of General Psychiatry* 64(3):305.

Williams, Terrie M. 2009. *Black Pain: It Just Looks Like We're Not Hurting*. Reprint edition. New York: Scribner.

Woods-Giscombé, Cheryl L. 2010. "Superwoman Schema: African American Women's Views on Stress, Strength, and Health." *Qualitative Health Research* 20(5):668–83.

APPENDICES

Appendix A. NSAL Survey Items

Table 10. *Strong Black Woman Characteristics and Related NSAL measures*

NSAL Survey Question	Response Items
Strength - External	
JH1. I've always felt that I could make of my life pretty much what I wanted to make of it.	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
JH2. Once I make up my mind to do something, I stay with it until the job is completely done	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
JH3. I don't let my personal feelings get in the way of getting a job done.	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
JH6. I like doing things that other people thought could not be done.	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
JH7. I feel that I am the kind of individual who stands up for what he believes in, regardless of the consequences.	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
JH8. Hard work has really helped me to get ahead in life.	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
JH9. When things don't go the way I want them to, that just makes me work even harder	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
JH10. It's not always easy, but I manage to find a way to do the things I really need to get done.	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
JH11. Very seldom have I been disappointed by the results of my hard work.	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
JH12. In the past, even when things got really tough, I never lost sight of my goals	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
MA1. There is really no way I can solve some of the problems I have	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
MA2. Sometimes I feel that I'm being pushed around in life.	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
MA3. I have little control over the things that happen to me	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
MA4. I can do just about anything I really set my mind to	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
MA5. I often feel helpless in dealing with the problems of life	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
MA7. There is little I can do to change many of the important things in my life.	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
Ethnic/Racial Pride	
SS1. How true about you...are intelligent	Very True (1), Somewhat True (2), A little True (3), Not True At All (4)
SS2. How true about you...are lazy	Very True (1), Somewhat True (2), A little True (3), Not True At All (4)
SS3. How true about you...are hardworking	Very True (1), Somewhat True (2), A little True (3), Not True At All (4)
SS4. How true about you...give up easily	Very True (1), Somewhat True (2), A little True (3), Not True At All (4)
SS5. How true is it that you are proud of yourself	Very True (1), Somewhat True (2), A little True (3), Not True At All (4)

NSAL Survey Question	Response Items
SE1. I feel I am a person of worth, at least on an equal basis with others	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
SE2. I feel that I have a number of good qualities	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
SE3. All in all, I feel that I am a failure	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
SE4. I am able to do things as well as most other people.	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
SE5. I feel I do not have much to be proud of.	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
SE6. I take a positive (good) attitude toward myself.	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
SE7. On the whole, I am satisfied with myself	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
SE8. I wish I could have more respect for myself	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
SE9. I certainly feel useless at times	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
SE10. At times I think I am no good at all	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
Everywoman – Family	
E36. How well have you done in taking care of your family's wants and needs	Very Well (1), Fairly Well (2), Not Too Well (3), Not Well At All (4)
E35a. How often do you make your family feel loved and cared for	Very Often (1), Fairly Often (2), Not Too Often (3), Never (4)
E35b. How often do you provide family transportation	Very Often (1), Fairly Often (2), Not Too Often (3), Never (4)
E35c. How often do you help family with regular chores	Very Often (1), Fairly Often (2), Not Too Often (3), Never (4)
E35d. How often do you help financially	Very Often (1), Fairly Often (2), Not Too Often (3), Never (4)
E35e. How often do you help when family is sick	Very Often (1), Fairly Often (2), Not Too Often (3), Never (4)
E64c. Adult daughters are more responsible for older parents than are adult sons	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
Everywoman – Community	
How often do you make the people in your place of worship feel loved and cared for	
Religion/Spirituality	
RS1. I look to God for strength, support, and guidance.	Strongly Agree (1), Somewhat Agree (2), Somewhat Disagree (3), Strongly Disagree (4)
RS2. Pray or get someone to pray for me	Very Often (1), Fairly Often (2), Not Too Often (3), Hardly Ever (4), Never (5)
RS3. How important was religion in your home while you were growing up	Very important (1), Fairly Important (2), Not too important (3), Not important at all (4)
RS4. How important is it for parents to send or take their children to religious services	Very important (1), Fairly Important (2), Not too important (3), Not important at all (4)
RS5. How important is religion in your life	Very important (1), Fairly Important (2), Not too important (3), Not important at all (4)

NSAL Survey Question	Response Items
RS6. How important is spirituality in your life	Very important (1), Fairly Important (2), Not too important (3), Not important at all (4)
RS7. How important is prayer when you deal with stressful situations	Very important (1), Fairly Important (2), Not too important (3), Not important at all (4)
RS8. Overall level of religiosity	
RS9. Overall level of spirituality	
Emotional Suppression	
EM1. I don't let my personal feelings get in the way of getting the job done.	Completely True (1), Somewhat True (2), Somewhat False (3), Completely False (4)
EM2. Make problems easier...use alcohol or other drugs to help me get through it	Very Often (1), Fairly Often (2), Not Too Often (3), Hardly Ever (4), Never (5)
EM3. Make problems easier...Eat more than usually do	Very Often (1), Fairly Often (2), Not Too Often (3), Hardly Ever (4), Never (5)

Appendix B. Model Fit Indices for Cross-Validation Subsamples

Table 11. Model Fit Indices for Exploratory Latent Class Analysis Using African American Woman Sample (N=1443)

Model (k-class)	LL	npar	Model LR χ^2	df	p-value	BIC	CAIC	AWE	LRTS	Adj LMR p-value	BF (K, K+1)	cmP(K)
1	-6252.46	12	2002.071	9391	1	12592.22	12604.22	12715.52	448.19	0.0002	1.52293E-78	6.42897E-80
2	-6026	25	2100.256	9391	1	12233.860	12258.86	12490.72	99.756	0.6778	0.044090982	0.042214449
3	-5975.59	38	2092.674	9391	1	12227.62	12265.62	12618.05	77.893	0.4759	2766.947483	0.957439524
4	-5936.24	51	2110.872	9391	1	12243.47	12294.47	12767.47	43.321	0.4818	1.06883E+11	0.000346027
5	-5914.35	64	2114.074	9391	1	12294.26	12358.26	12951.83	38.873	0.4750	1.01104E+12	3.23744E-15
6	-5894.7	77	2121.017	9391	1	12349.54	12426.54	13140.68	--	--	--	3.20209E-27

Table 12. Model Fit Indices for Exploratory Latent Class Analysis Using Caribbean Black and White Woman Sample (N=832)

Model (k-class)	LL	npar	Model LR χ^2	df	p-value	BIC	CAIC	AWE	LRTS	Adj LMR p-value	BF (K, K+1)	cmP(K)
1	-3668.13	12	4590.079	9255	1	7416.954	7428.954	7533.64	201.375	0.7682	5.6588E-26	4.14624E-31
2	-3566.3	25	4593.389	9255	1	7300.686	7325.686	7543.782	109.798	0.3652	7.3413E-06	7.32706E-06
3	-3510.77	38	4588.469	9255	1	7277.042	7315.042	7646.547	85.753	1	1.40143961	0.998065155
4	-3467.4	51	4591.233	9255	1	7277.717	7328.717	7773.633	61.962	0.7699	235507.962	0.712171362
5	-3436.07	64	4586.003	9255	1	7302.456	7366.455	7924.781	--			3.02398E-06

Table 13. Model Classification Diagnostics for the Three-Class Unconditional Latent Class Analysis ($E_3=.629$) for Full Sample

Class k	π_k	95% CI	$mcaP_k$	$AvePP_k$	OCC_k
Class 1	0.22561	0.161, 0.290	0.20757	0.82	15.63661
Class 2	0.61035	0.498, 0.745	0.66101	0.859	3.889285
Class 3	0.16404	0.021, 0.307	0.13142	0.775	17.55314

Table 14. Model Classification Diagnostics for the Four-Class Unconditional Latent Class Analysis ($E_4=.705$) for Full Sample

Class k	π_k	90% CI	$mcaP_k$	$AvePP_k$	OCC_k
Class 1	0.59068	0.478, 0.703	0.65445	0.846	3.806802
Class 2	0.15479	0.035, 0.274	0.1098	0.776	18.91627
Class 3	0.029	0.008, 0.050	0.03465	0.811	143.6747
Class 4	0.22553	0.182, 0.269	0.2011	0.835	17.37812