

BLACK CARIBBEANS' POST MIGRATION WELLBEING-ARE RELIGIOSITY  
AND SOCIAL SUPPORT ENOUGH TO PROTECT AGAINST ACCULTURATIVE  
STRESS?

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by  
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ABSTRACT

The relationship between well-being, religion, and/or social support has previously been observed in the African American community, both as a main effect and as moderator of predictors of well-being. Religion and social support are related to lower incidences of mental health dysfunction, tighter knit families and overall greater satisfaction with life (Hughes, Kiecolt, Keith & Demo, 2015; Jones, Cross & Defour, 2007; Pieterse, Todd, Neville & Carter, 2012). Concern of mental health (anxiety, depression) within the immigrant Black Caribbean population may require addressing the role of acculturative stress within the acculturation/immigration processes, and how this specific form of stress engenders either health or dysfunction. While (some of) these relationships have been studied, and validated in the African American community, little is known of how these relationships develop in the immigrant Black Caribbean community, and ways that they may be addressed. Given the close resemblance that Black Caribbeans share with the African American community phenotypically and culturally, the possibility of associations of negative mental health outcomes buffered by social support and religiosity existing in a Black Caribbean community would seem highly likely. Through an Ecological Systems viewpoint, this study sought to determine the existence of these relationships. It was hypothesized that social support, religiosity and the combination of the two factors would

provide significant buffering, thereby minimizing acculturative stress towards healthier mental health outcomes and satisfaction with life. These hypotheses were not supported in the regression analysis in that there were statistically non-significant findings in correlations between the predictor and outcome variables, as well as the moderator/interaction variables. Additional interpretation was gleaned from 3 optional opened ended questions. Although social support was positively associated with satisfaction with life, it did not buffer the relationship between acculturative stress and depression. Results were further discussed with consideration to the responses to the open-ended questions.

## APPROVAL PAGE

The faculty listed below, appointed by the Dean of the School of Education, have examined a dissertation titled Black Caribbeans' Post Migration Wellbeing-Are Religiosity and Social Support Enough to Protect Against Acculturative Stress? presented by Shavern T. Browne, candidate for the Doctor of Philosophy degree and certify that in their opinion it is worthy of acceptance.

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## CHAPTER 1

### INTRODUCTION

Immigration is an asset to the diversification of a country's population and workforce. Historically, people have immigrated to the United States from all over the globe and the Caribbean islands have contributed significantly to the cultural variation in the United States through persons with statuses of naturalized citizenship, lawful permanent residency or non-immigrant admissions. In 2016, Zong and Batalova noted that approximately four million immigrants from the Caribbean resided in the United States, accounting for 9% of the nation's 43.5 million immigrants, which is statistically, systemically and numerically a large number. Black Caribbeans comprise almost half (49%) of the U.S. Caribbean immigrant population, yet far too little is known about this community of migrants, how and why they migrated, their mental health and how they sustain wellness.

There are many factors that go into the decision pre-migration. For example, destination (of migration) can be shaped by external factors, namely, the labor needs and immigration policies of foreign countries (Thomas-Hope, 2000). The United States has been a favorite destination for Black Caribbeans because of its proximity to the Caribbean region and its long-held reputation as a country with a flourishing economy that promises an improved quality of life for those who are willing to work hard in pursuit of their dreams, regardless of skill and documentation status (Wheeler & Mahoney, 2008). Statistics suggest that the U.S. Caribbean population continues to grow (Zong & Batalova, 2016), which underscores the need to gain more information about their post-migration experiences and well-being.

## **Black Caribbean Distinction**

As documented in the Census and other statistics, Black Caribbeans significantly contribute to the ethnic diversity of the U.S. immigrant population. However, there is a dearth of formal research on their subjective experiences and the communities in which they reside and on their social-developmental and mental health concerns. As proposed by Venner (2015), to fully understand the experiences of U.S. Black Caribbeans, researchers must first address how and where they originated, their acculturation experiences, and any circumstances that may interfere with a smooth acculturative process.

Historically, Black Caribbeans in the United States have been generalized as being part of the larger Black American population (Sanchez & Awad, 2016). For example, demographic forms typically do not provide respondents with options to specifically indicate their ethnic background, and simply provide racial options (e.g., Black/African American). Unfortunately, grouping of all Black cultures under the “African American umbrella” does a disservice to the uniqueness of the Black Caribbean cultural characteristics and essentially makes distinguishing their needs from African Americans quite difficult (Gibbs, Okuda, Oquendo, Lawson, Wang, Thomas, & Blanco, 2013). This limited mode of identification is insufficient information on the Black Caribbean population.

Additionally, examining similarities and differences between Black Caribbeans and Black/African Americans can help identify any shared protective factors utilized to maintain wellness with regards to mental health. Findings from such an exploration adds insight into the unique cultural implications of the Black Caribbean immigration experience and deepens the understanding of their uniqueness as they navigate the immigration process.

Often, people would assume that Black Caribbeans may try to integrate into the Black/African American community; however, research would suggest that Black Caribbeans highly value their ethnic identity and prefer to distinguish themselves from Black/African Americans. Maintaining a distinct ethnic (Caribbean-based) identity has been evident even among persons who were not born on Caribbean islands but who are descendants of Black Caribbean migrants (Benson; 2006). Waters (1994) examined the process of ethnic identity development among second generation Black Caribbean immigrants to the United States; the assertion was that second generation Black Caribbeans strive to connect with their Caribbean heritage, but that the markers of their culture are less detectable than their parents who often have distinct accents. Literature further suggests that first-generation Black immigrants (born outside of the United States) tend to distance themselves from Black Americans, by stressing that their ethnic origins are distinct (Waters, 1994), and superior in status. For making such a firm stance to distinguish themselves, Black Caribbeans often face scrutiny and may encounter pressure to identify only as "Black" potentially limiting their ability to access resources and increasing their experiences with acculturative stress.

It is possible that some Black Caribbeans may also make efforts to connect with mainstream culture, as doing so may provide them with a feeling of psychological relief as they may feel welcomed in both settings (culture and mainstream). However, the process of maintaining their original culture and adapting to American culture may be stressful and can contribute to other mental health concerns. For example, Black Caribbeans may engage in "Codeswitching" (alternating between two or more languages/dialects or behaviors). It is often intentional and can result in "switchers" feeling disconnected and disingenuous (Wilson, 2009). In addition, Black Caribbeans may face the "Black card" dilemma in that even many years post

migration, they may be viewed as not “Black enough” by African Americans and may be too Americanized by Caribbeans (Gordon, 2007, p. 80).

Research has highlighted additional complexities of navigating ethnic differences among immigrants who identify as Black/African American (Waters, Kasinitz & Asad, 2014). For example, although the concept of race is salient in the United States, racial identity may not be as salient for Black Caribbeans. Black Caribbean immigrants may struggle to decipher the differences among Blacks in America, as they may have probably never been exposed to Black communities beyond that of other Black Caribbeans on their island. Although Black Caribbeans and African Americans do share many racialized experiences, as both communities often struggle to be included by the White majority, the *cultural* distinctions between these two groups are not always clear (Waters et al., 2014).

The cultural similarities between Black Caribbean and African Americans may make it difficult to fully understand the acculturation experiences of Black Caribbeans in the United States, as they have been historically viewed as “invisible immigrants” (Gordon, 2007, p. 80; Joseph & Baker, 2012), given that as previously mentioned they are often generalized as part of the Black/African American community due to racial phenotype. Challenges of navigating the power differential in their interactions with White Americans are heightened when Black Caribbeans face the additional challenge of having to integrate themselves into the dominant racialized culture (i.e. Black/African Americans), to garner “safety and acceptance” (Waters, 1994) or a perceived sense of security, where they do not necessarily stand out or can be easily identified as Black Caribbean.

One similarity between African Americans and Black Caribbeans is their ability to cope and protect themselves against stress with the use of religiosity and social support from

established communities. Religiosity (Hayward & Krause, 2015) and social support from family and friends (Levine, Taylor, Nguyen, Chatters & Himle, 2015) are staples for Black Caribbeans, but the stresses of migration and acculturation can often negatively impact their well-being (Bécares, Nazroo, Jackson, & Heuvelman, 2012). Based on the resemblances with Black Americans and not with other immigrants, it is possible to infer that these immigrants may not have their specific psychosocial needs met always.

Therefore, the purpose of this study is to examine ways that Black Caribbeans in the United States can maintain life satisfaction and guard against the negative effects of maladaptive mental health outcomes using protective factors, including religiosity and social support. Below, I introduced each of the study constructs and further discuss them within the context of existing research on Black Caribbeans and Black/African Americans. When available, I highlight major commonalities and differences in relation to their mental health.

## **Study Constructs**

### **Mental Health/Depression**

Depression is viewed as a mood and affect disorder resulting in significant burden to the person experiencing the symptoms and the people and relatives around them. Several symptoms of depression are observable and meet criteria for diagnosis of clinical depression such as (but not limited to) visible depressed mood, somatic complaints, sleep difficulties, and digestive problems. Kirmayer, Gomez-Carrillo and Veissiere (2017) stated that other variations of specific symptoms of depression are present cross-culturally (social isolation or loneliness, anger, crying and diffuse pain) and they have been omitted from recent diagnostic criteria. The importance of including these symptoms is because cultures display depression differently and symptoms can

manifest following a stressful and singular event such as migration. For this study, depression was conceptualized as a mood/affect disorder with observable symptoms.

Black Caribbean migrants to the United States at different age and developmental levels and the rates of young Caribbean adults (and late adolescents) who pursue tertiary education in the United States is increasing (Pinder, 2012; Sanchez & Awad, 2016). Given the hurdles of migration, combined with the stresses of acculturating to U.S. culture, younger Black Caribbean migrants who are pursuing higher education in the United States may face additional stresses on their mental health. This necessary attention may be prompted by research on mental health in the Caribbean where psychological distress was found to be associated with environmental factors. Lowe, Lipps Gibson, Halliday, Morris, Clarke and Wilson (2014). conducted a study on four Caribbean islands (Jamaica, Bahamas, St. Kitts and Nevis, and St. Vincent) and examined the psychological well-being among adolescents, looking specifically at how environmental factors (e.g. home, neighborhood, school) affect their mental health. Results revealed that 52.1% of the participants described mild to severe symptoms of depression and poor neighborhood quality was indicative of depressive symptoms. The importance of this finding is underscored as adolescent migrants do not get to determine the neighborhood into which they will be resettled thereby warranting further inquiry into the ways that Caribbean individuals manage their depressive symptoms within the context of the United States, with attention to the variation in their developmental levels, social support systems, environment and potential for untreated depression.

### **Satisfaction with Life (SWL)**

According to Diener (1984), being satisfied with life comes from a person's assessment or judgment of their life in relation to their standards, values, motivations and goals. It allows for

the individual to hone in on positive states of being rather than focusing on unpleasant emotions, while emphasizing one's own standard of evaluation. Studies that have focused on life satisfaction among African American and Black Caribbean communities have found that both groups tend to struggle with life satisfaction amidst experiences with racial discrimination (Lincoln, Taylor, Chae, & Chatters, 2010; Seaton, Caldwell, Sellers, & Jackson, 2010). For example, perceived discrimination has been linked to lower life satisfaction levels among African American and Black Caribbean youth (Rumbaut, 1994; Seaton, Caldwell, Sellers & Jackson, 2008). Although research on the impact of perceived discrimination is certainly important, it is also necessary to examine factors like acculturation and acculturative stress, both of which may have a direct impact on an immigrant's experience as they attempt to achieve life satisfaction.

### **Social Support**

As noted by Burke, Neimeyer, & McDevitt-Murphy (2010) in their exploration of social support (during bereavement), social support is a supportive relationship that promotes resiliency and can be contextualized in several ways, including perceived and actual support, the size of the support network, type of support (family vs. nonfamily support). Studies have confirmed the beneficial effects of social support citing improved mood, heightened optimism, and when provided in a validating environment improved self-esteem (Marigold, Cavallo, Holmes, & Wood, 2014). In the United States, social support has been observed as a buffering/protecting agent in the post-migration process in ethnic communities (Derr, 2016; Lee, Friedmann, Kverno, Newhouse, Zhang, & Thomas, 2015). Among Black Caribbeans, studies have highlighted the importance of social support, noting that family and kinship are instrumental for ethnic identity formation and preservation of cultural values and traits (Lincoln, Taylor and Chatters, 2013),

possibly because of the collectivist nature within most immigrant populations (as described by Murray-Johnson, Witte, Liu, Hubbell, Sampson, & Morrison, 2001). Social support may also be a protective factor against negative outcomes in the Black Caribbean community given its usefulness in African American communities (Lincoln & Chae, 2012; Lincoln, Chatters & Taylor, 2007). Odafe, Salami and Walker (2017) found that social support buffered against race related stress, and it was negatively associated with hopelessness in African American adults. +

### **Religiosity**

Religiosity can be defined as the expression of or frequency of being involved or engaged in different religious activities and practices (Seeman, Dubin, & Seeman, 2003) and has been found to have an impact on a person's mental health and psychopathology (Plante & Sherman, 2002). Specifically, studies have found that religious coping orientations are salient aspects of life for African Americans as well as Black Caribbean populations (Superville, 2015). However, there are different types of religious engagement. Chatters, Taylor, Jackson and Lincoln (2008) found that African Americans have a more "elaborate" prayer life than Whites. The authors also determined that prayer (e.g., non-organized religious activity) is important when dealing with stressful situations. Data extracted from multiple studies with adults of different ethnic backgrounds derived from multiple disciplines and fields of inquiry also suggested that religious behaviors centered on organized activities (e.g., church attendance) as well as intrinsic beliefs about religiosity (e.g., being a good person, doing good to others) can have a protective influence, in that religious coping can moderate the impact of adverse interpersonal life events on physical and mental health (Smith, McCulloch, & Poll, 2003).

## **Acculturation**

Acculturation refers to culture changes that immigrants experience as they adapt to the culture of the new country, through continuous contact with the new culture group (Berry, Kim, Minde & Mok, 1987). Older research determined acculturation was a process of assimilation, where immigrants acquire the practices of their receiving culture and simultaneously discard the practices of their cultural heritage (Gordon, 1964). Although persons are usually expected to eventually adapt to the culture of which they have recently joined, the process is not always a smooth transition. At times, immigrants of color (Black Caribbeans included) may encounter discrimination that can limit their access to resources, hinder their acculturation process and affect their wellbeing. Schwartz, Waterman, Umaña-Taylor and several others (2013) examined the association between acculturation and different types of well-being (e.g., psychological and subjective well-being) in a large sample of first and second-generation immigrant students that represented six ethnic groups including African Black and Caribbean participants. The authors determined that the links between well-being and acculturation require future research to examine their association dimensionally.

Because acculturation is considered a multidimensional process that can involve several changes in the lives of immigrants (e.g., language competence and use, cultural identity, attitudes and values, food and music preferences, media use, ethnic pride, ethnic social relations, cultural familiarity, and social customs (Yoon, Langrehr, & Ong, 2011), it is important to consider whether holding to the values of their culture without conforming to the new culture can protect against negative symptomology on their psychological well-being.

## **Acculturative Stress**

The acculturation process for immigrants born outside the host culture can be very stressful as they must learn to live in another culture where cultural norms and their social statuses may change (Baker, Soto, Perez & Lee, 2012). Acculturative stress is stress that is related to cultural adaptation because of a move from one's culture of origin to another culture (Walker, Wingate, Oasi & Joiner, 2008). Associated with acculturative stress are some specific stress behaviors of anxiety, confusion, feelings of marginality and identity confusion. Empirical studies of acculturation (among first-generation Asian Americans) have generally found a positive correlation between acculturative stress and poorer mental health (Yeh, 2003). Berry et al. (1987) further posited that acculturation stressors can reduce a person's health and may have long lasting negative effects. Research has indicated that acculturative stress can manifest as symptoms of depression, anxiety, and suicidal ideation (Hovey 2000; Organista, Organista, & Kurasaki, 2003; Torres & Rollock, 2004). The role of acculturative stress in mental health research is important with immigrants, as these stressors may determine their level of comfort and settlement in the new country.

## **Research Hypotheses**

Based on literature that has identified a correlational relationship between acculturative stress and depression (Chae, Park & Kang, 2014; Wrobel Farrag & Hymes, 2009) along with a correlational relationship between acculturative stress and SWL outcomes (Baker, et al., 2012; Scottham & Dias, 2010), and that both religiosity and social support (Renner, Laireiter & Maier, 2012) can potentially provide a protective buffering effect against the negative effects of acculturative stress and depression (Jenkins, Belanger, Connally, Boals, & Durón, 2013), this study focused on the moderating role of religiosity and social support in the relationship between

acculturative stress and SWL among a sample of Black Caribbeans in the United States. A second exploration of the moderating role of religiosity and social support in the relationship between acculturative stress and depression was also conducted. Given that the current study focused on Black Caribbeans who have migrated to the United States, their level of acculturation was controlled while highlighting the stressors associated with the acculturation process. With those variables in mind the following hypotheses tested for the following:

1. A positive significant relationship between acculturative stress and depression, such that participants who reported/endorsed more symptoms of acculturative stress will report higher symptoms of depression.
2. A negative significant relationship between acculturative stress and SWL, such that participants who report/endorse more symptoms of acculturative stress will report lower SWL.
- 3a. Religiosity buffering the relationship between acculturative stress and SWL. Specifically, when entered as a moderator in the relationship between acculturative stress and SWL, high levels of religiosity will buffer the negative effects of acculturative stress on SWL, such that the relationship will become weaker. Non-organized and Intrinsic religiosity will moderate the relationship between acculturative stress and SWL more than organized religious attendance.
- 3b. Similarly, religiosity will buffer the relationship between acculturative stress and depression. When entered as a moderator, high levels of religiosity will buffer the negative effects of acculturative stress on depression, such that the relationship will become weaker and depression decreased. Non-organized and intrinsic religiosity will moderate the relationship better than organized religious attendance.

4a. Social support buffering the relationship between acculturative stress and SWL.

Specifically, when entered as a moderator in the relationship between acculturative stress and SWL, high levels of social support will weaken negative effects of acculturative stress on SWL.

4b. Social support will also buffer the relationship between acculturative stress and depression where as a moderator the relationship between acculturative stress and depression will be weakened and depression decreased.

5. Religiosity and social support when entered together will moderate the relationship between (a) acculturative stress and (b) SWL, and acculturative stress and depression, such that their combined protection is more effective than one or the other.

6. Lastly, control variables were added (acculturation, demographic variables) to determine whether the experiences of acculturative stress, SWL, depression was buffered by (a) religiosity or (b) social support.

## CHAPTER 2

### REVIEW OF LITERATURE

The Caribbean (also referred to as the West Indies) contributes to the diversity of the global immigrant population and economy. The following chapter will present a literature review of Black Caribbeans in the context of their life in the United States, starting with a brief summarization of their origin and migration experiences. Research that highlights the current study constructs (i.e., depression, acculturative stress, SWL, social support, and religiosity) were addressed, as well as the influence of acculturation on the process of migration. I will comparatively discuss the study constructs within the context of African Americans and Black Caribbeans, and underscore the unique aspects of mental health, social support, and religiosity to Black Caribbeans. Additionally, this study was conceptualized through Bronfenbrenner's (1979) ecological systems theory, while accounting for the influence of acculturation. Overall, this chapter provided a rationale for this study and highlighted the potential benefits of social support and religiosity against depression for Black Caribbeans in the United States. Results of this study are intended to help inform the work of counselors and other mental health professionals who will support Black Caribbeans in their post-migration pursuits of achieving or maintaining their well-being in the United States.

#### **History**

The group *African Caribbeans* is composed of people from a multitude of islands (Agyemang, Bhopal, & Bruijnzeels, 2005) including Anguilla, Antigua and Barbuda, Bahamas, Barbados, Guyana (formerly British Guiana), Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Jamaica (formerly colony of Jamaica), Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago and the Turks and Caicos

Islands. The majority these of islands are sometimes broadly referred to as the Anglophone Caribbean, formerly known as the Islands of the British West Indies. The linguistic term, Anglophone, indicates that English is considered the official language, although natives may speak Afro-English or Afro-French creoles. In theory, the people of the Anglo Caribbean can understand Standard English, if not speak it. For this study, the term, *Black Caribbean(s)* was used to refer to this specific subset of the Caribbean population, who have historically been identified as African Caribbean, British Caribbean or Afro-Caribbean.

Black Caribbeans are people who can trace their heritage to Africa post-slavery, which includes the period following the discovery by Christopher Columbus and other European colonists. The Caribbean name is reminiscent of the early Caribs, who were native Indians. In the current study, I am focusing on Black Caribbeans who originated from islands once owned by Britain. Therefore, their dominant language is English (and dialects derived from the English language) and the current major inhabitants/population are identified as Black Caribbean. Inhabitants of other Craibbean islands are considered Danish Caribbean, Dutch Caribbean, French Caribbean, Portuguese Caribbean and Spanish Caribbean.

In the present study, I have made the decision to *exclude* individuals from the U.S. Virgin Islands and Puerto Rico, mainly because their native-born inhabitants are considered American citizens. As official U.S. residents, American culture is more salient and intertwined into their daily living (e.g., holidays) compared to the lives of non-American citizens. Also, their movement or travel to and from the United States is not restricted or controlled by visa applications, approvals, and/or rejections.

## **Caribbean Immigration/Migration to the United States**

Caribbean people have migrated all over the globe to countries within their own region, as well as to metropolitan countries such as Britain, Canada, and the United States, for/with the prospect of a "better" life for themselves and their children (Wheeler & Mahoney, 2008).

Thomas-Hope (2000) provided a snapshot of what the migration experience looked like for many persons in the Caribbean, dating as far back as the 1950s and 1960s. It was detailed that most of Caribbean migration involved movement between the United Kingdom and the Netherlands from the colonies they once owned. In 1962, Britain experienced a depletion of resources and started to restrict the movement from Caribbean countries, thereby initiating increased movements to Canada and the United States. At that time, changes in Canada's and the United States' immigration legislation provided many immigration opportunities and legislation that would prove beneficial to many Black Caribbean natives. From that time, North America became the major destination of British Caribbean migrants (who, as stated previously, are Black Caribbeans from islands once owned by Britain), the majority of whom originated from English speaking islands. In the 1990s, Trinidad and Tobago and Barbados were the most represented in this stream of voluntary migration, possibly because their economic infrastructure was unable to sustain their growing population (Brooks, 2013).

## **Contemporary Statistics on Black Caribbean Immigration to the United States**

In the United States, the presence of Black Caribbeans has become more evident in recent years. There has been a substantial increase in the number of Black Caribbean students in U.S. colleges and universities (Bennett & Lutz, 2009). As of 2009, approximately 3.5 million Caribbean immigrants resided in the United States; however, this estimate may be inaccurate, as with many migrant populations, it is likely that undocumented residents were not included.

Given their phenotypical similarities to African Americans, the Black Caribbean population may experience misclassification as African American (and not Black Caribbean), making their presence sometimes invisible. It is important to elucidate the differences between these two groups to help underscore that the African American experience does **not** equate the Black Caribbean experience, and therefore for the benefit of understanding the mental health of Black Caribbeans, constructs such as subjective well-being and satisfaction with life should not necessarily be automatically conceptualized in the exact same manner. However, the similarities cannot be ignored, and to assist in the understanding an overall “Black “experience in the United States and to gather data of African American’s experience of mental health research and help seeking, studies that have included an African Americans’ subjective experience were addressed throughout the study as a guideline for *some* interpretation of the findings.

### **Bronfenbrenner: Theoretical Positioning of the Study**

The migration experience of Black Caribbeans to the United States, including the acculturation process, can be understood in a framework of lifespan development that accounts for context. Govia, Paisley, and Palmer (2016) noted that “the development of each individual must be considered in relation to the social and cultural world in which they are embedded” (p. 120). By direct contact, development through complex interactions with the environment and the people within it can cause an immigrant to experience mental, emotional and psychological changes. Many theoretical perspectives can be used when examining lifespan development. However, Bronfenbrenner’s (1979) Ecological Systems Theory delivers a way to think about the reciprocity that occurs during the immigration process, especially acculturation. Ecological Systems provides a framework where individuals are understood as functioning within a larger collective group that influences the development of the individual. Bronfenbrenner (1979)

viewed this framework as a set of nested systems that impact each other, reflecting the conditions of the environment and the individuals' direct and indirect involvement with the environment over time. The five levels outlined within the theory are the microsystem, mesosystem, exosystem, macrosystem, and chronosystem.

The microsystem is the smallest and inner system and encompasses the setting where the individual is most directly involved. The setting of the microsystems is dictated by the individual's activities, roles and interpersonal relationships (e.g., family, school, peers, and work). The mesosystem, the next level, identifies interconnections between a person's microsystems (e.g., connection between a person's family and friends). The exosystem is not directly influenced by the individual but can affect a person in more systemic and indirect ways (e.g., neighborhood, media, politics), as the actions or influence of organizations in the exosystem may influence the well-being of a person. The macrosystem can be considered the most abstract system that the individual uses to conceptually understand all other systems that can shape their attitudes, ideologies, and culture. The macrosystem includes cultural systems, political systems, economic patterns, laws and customs within which the individual resides (e.g., racial attitudes, societal changes, cultural context). Finally, the chronosystem notates how these systems may shift in importance and relevance over time, thereby influencing the developmental journey of the individual, and possibly their mental health. For example, Black Caribbeans who have migrated to the United States in the past 20 years are likely to have had a different experience than individuals who migrated 50 years ago, given advancements in technology, tensions in race relations, and availability of community resources. As a model of development, Ecological Systems theory can help explain how factors of adjustment and well-being should be

understood when applied to the experiences of Black Caribbeans who migrate to the United States.

### **Developmental Studies in the Caribbean and the United States**

Jethwani-Keyser, Mincy and Haldane (2013) provided one example of Bronfenbrenner's Ecological Systems Theory used as a framework in research of the examination of outcomes of well-being among participants residing on mostly English-speaking Caribbean islands. The study identified the social environment as the primary context for development and examined adolescents' perceptions of adult-related factors of parenting, violence, decision to pursue advanced education, and aggression in the household. In a Bermudian sample of adolescents, Jethwani et al. (2013) noted a productive and encouraging influence of education and educational achievement on family relationships and other social relationships. Results also found protective factors across multiple systems. School settings and family environments (microsystems) and the interaction between the two (meso-system) were deemed protective in youth development (Jethwani et al., 2013). This study identified the utility of the theory with this population.

Furthermore, studies have also used Bronfenbrenner's model as a framework to examine relations among African American families (Simpson & Parsons, 2009; Smokowski, Evans, Cotter & Guo, 2014). In a qualitative study on education outcomes, Simpson and Parsons (2009) found that the meso, exo, macrosystems had significant influences on the ways that African American parents and children understood the difference between the curriculum that they received and the curriculum at other institutions. The findings were indicative of the relationships between child friendly teachers who taught within real life contexts and helped nurture students' identity. In addition, Smokowski and colleagues (2014) examined how stresses in the micro, meso and macro systems can operate as risk factors for negative outcomes among

youth. Specifically, high levels of depression and low self-esteem were associated with low socio-economic standing and negatively linked with parent and peer relationships. Furthermore, this research endorsed the protective nature of certain systems noting that supports within the microsystem have been associated with higher self-esteem of African Americans when compared to White Americans. The authors proposed that these results may have been attributed to African Americans having a strong ethnic identity, religiosity factors and supportive peer relationships. Across participants, social support in the microsystem was responsible for low levels of depressive symptoms and high levels of self-esteem (Smokowski et al., 2014).

Given the inherent utility of Ecological Systems Theory, and the ability of the model to account for interactions between systems that can affect the individual, this theoretical approach seems appropriate as a broad framework to help address the various social-cultural influences on Black Caribbeans' experiences with mental health post-migration. Similarly, this model facilitated further discussion regarding Black Caribbeans' ability to access supportive and protective mechanisms to guard against mental health outcomes related to depression and SWL.

### **Acculturative Stress**

Acculturative stress is determined to be a unique form of stress experienced by individuals or groups when adjusting to a new culture that often results in a reduction of positive psychological, somatic, and social life balance (Livingston, Neita, Riviere, & Livingston, 2007). The acuteness of the stress is contingent upon personal factors that may include (but not limited to) education, gender, language and race (Livingston et al, 2007). The authors noted that research specificity for (Black) Caribbean requires attending to the interplay of race, ethnicity and acculturation. The distinction is necessary as (Black) Caribbean immigrants may strive to *not* acculturate into the mainstream culture to preserve their ethnicity and avoid the stigma

associated with Black/African Americans (Livingston et al, 2007). Black Caribbeans may even avoid associations with Black/African Americans given their experiences with low social status in the United States (Waters, 1999). Overall, very few studies have examined acculturative stress among Black Caribbean groups, given that most research on acculturative stress has focused on Latin American and Asian American immigrant groups (Superville, 2015).

It should be noted that Black Caribbeans may face unique challenges when attempting to ethnically distinguish themselves from Black/African Americans. For example, when Black Caribbeans vehemently work to distinguish themselves from Black/African Americans, they can develop tense or strained relationships with the Black/African American community (Thornton, Taylor, & Chatters, 2013), a community that in some ways are their allies. In addition, further strain between these two groups can occur when employers presume that Black Caribbeans may be superior in their job compliance, work ethic, and aptitude for learning when compared to Black/African Americans who were born in the United States. Scholars have suggested that Black Caribbean immigrants may be America's new model minority group (Gordon, 2007; Joseph, Watson, Wang, Case & Hunter, 2013; Shaw-Taylor, 2007; Thornton, Chatters & Taylor, 2013) as this distinction has been mostly associated Asian Americans.

### **Ethnic Identity**

Without methods to preserve their ethnic heritage in place, Black Caribbeans may interpret aspects of the acculturation process as threatening their ability to maintain a connection to their ethnicity. According to Wilson (2009), immigrants often retain strong feelings toward gaining American citizenship. Wilson's (2009) study revealed that participants viewed that accepting U.S. citizenship was akin to transgression and betrayal of their original county. Furthermore, participants felt that they were being forced into an identity that they did not agree

to (i.e. African American) and caused some immigrants to reject the African American label altogether. American Citizenship was viewed as an ideological commitment seeped with a history of actions and values with which they (Black Caribbeans) fundamentally disagreed with. Making the formal transition to American citizenship represented not only a foreseen cultural loss that was beyond their control, but a political and ideological choice regarding the acceptance of United States policies, which may include covert discrimination practices.

### **Fading to “Black”**

For many Black Caribbean immigrants, merging with Black/African American culture may be interpreted as a loss of status, feeling as though identifying as Black/African Americans gives up their cultural distinctiveness and strips away their dominant racial and social status (in the Caribbean). Although the terms race, skin color, and ethnicity are often used interchangeably, consolidating the conceptual meaning of these different terms, can have negative implications for Black Caribbeans. For example, classifying all Black individuals as African American suggests a homogeneity of cultures and backgrounds (Hall & Carter, 2006; Rong & Brown, 2001) with very little consideration for between and within cultural group differences (Thomas, Caldwell, Faison, & Jackson, 2009). The consequences bleed into society’s perceptions and may be as minor as referring to a Black Caribbean individual as *African American* in social settings, or as drastic as making incorrect classifications in research and in other academic and medical fields. As a result, higher education professionals and community and mental health providers often know very little about Caribbean culture and even less about the historical, social, and cultural idiosyncrasies that may impact their racial experiences and mental health (Greenidge & Daire, 2010).

## **Negative Effects of Acculturative Stress**

Acculturative stress has been linked to negative consequences in the Black/African American community. In a study on acculturative stress, depression, and suicidal ideation among Black/African American college students, Walker (2007) found that suicidal ideation increased for students who were depressed and experiencing acculturative stress. Acculturative stress has also been determined to be a specific risk factor of depression and anxiety in the Latin American immigrant population (Revollo, Qureshi, Collazoa, Valero, & Casas, 2011), such that homesickness was the highest risk factor of acculturative stress which possibly could be due to immigrants having fewer social and familial resources. Another study determined that even with self-concealment and social efficacy, the effect of depressive symptoms in the face of acculturative stress could not be mitigated for African, Asian, and Latin American college students (Constantine, Okazaki, & Utsey, 2004).

In addition, life satisfaction has also been found to be impacted by acculturative stress. For example, in a sample of Finnish participants who migrated to Russia, Lönnqvist, Leikas, Mähönen and Jasinskaja-Lahti (2015) found that acculturative stress and difficulties adjusting to a new culture were associated with well-being and life satisfaction. Although the negative implications of acculturative stress have been documented on the life outcomes of multiple ethnic and immigrant groups, including African Americans (Thompson, Anderson and Bakeman, 2000), Chinese international students (Zhang & Yung, 2017), Filipino migrants (Maneze, Salamonson, Attwood & Davidson, 2014), Latin American immigrants (Revollo et al., 2011) and Vietnamese immigrants (Chae et al., 2014), the link between acculturative stress and life satisfaction has not been fully examined among Black Caribbean populations.

## Depression

### Depression Statistics in the United States

According to the World Health Organization (WHO, 2013), mental illness results in more rates of disability in developed countries than any other group of illnesses, including cancer and heart disease. Other published studies report that about 25% of American adults have a mental illness and that nearly 50% of Americans will develop at least one mental illness during their lifetime. One of these mental illnesses is depression, which has been characterized by a repeated pattern of apparent or disclosed feelings of constant unhappy moods, feelings of worthlessness, and fatigue as described by The *Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> Edition (DSM-5)*: American Psychiatric Association, 2013). (Major) Depression is the leading cause of disability for Americans between the ages of 15 and 44 and among major ethnic and racial groups in the United States and worldwide (Center for Disease and Control, 2010;). The National Center for Health Statistics (2009) has also highlighted that depression is a major mental health concern that affects *all* segments of the U.S. population and can interfere with physical health (e.g., increased rates of morbidity and mortality) and social burdens (e.g., lost productivity and health care expenditures). Findings from the National Survey of American Life (2003) indicate that approximately 1 in 20 persons in the combined Black (African American and Caribbean) population in the United States reported experiencing depression. While this number may seem insignificant, conceptually it can be assumed then that 1 in every 20 Black immigrants will report depression (1 in every 20 Afro Caribbean migrants as well).

Lincoln et al., (2007) sought to identify the depressive symptom profiles in an adult sample of racially diverse participants. The authors noted that overall, African Americans reported a higher mean number of depressive symptoms compared to Caribbean Blacks.

Furthermore, Black Caribbeans and African Americans were found to have lower lifetime estimates of Major Depressive Disorder (MDD) than non-Hispanic Whites, but higher levels of chronicity and rated severity of MDD. Although these findings may speak to the resiliency of Black Caribbeans, these results should not be used to discount the need to further investigate the mental health of this population. Moreover, it underscores the importance of considering what protective factors are in place to restrict higher incidences of MDD and other maladaptive psychological functioning in the Black Caribbean community.

### **Depression and Migration**

The U.S. population will inevitably continue to increase owing intentional and unintentional migration; its diversity will also expand because of the presence of multiple cultures and people. In fact, it has been estimated that by the year 2052, half of the United States will be composed of ethnic or racially diverse individuals. As racially and ethnically diverse individuals continue to populate the United States, it is imperative that the standards of care across the spectrum of physical and mental health are not only derived from the experiences of White people, the current dominant culture. For example, depression needs to be considered separately as a bi-product of the immigration experience for specific populations like Black Caribbeans. Bhugra (2003) determined that depression (post migration) may be in response to a sense of loss of both objects and relationships, as well as fears associated with having a loss of external locos of control and limited prospects for the future.

Other circumstances/factors that may contribute to immigrants experiencing depression, could include difficulty finding employment, adapting to climate changes (winter), and adjusting to new social conditions where they are no longer part of the majority (Lashley, 2000). There is evidence to suggest that increased exposure to minority status in the United States is associated

with a higher risk for psychiatric disorders among Caribbean Blacks (Williams, Haile, Gonzalez, Neighbors, Baser & Jackson, 2007). Potentially, the reports of 1 in 20 (by the National Center for Health Statistics [2009]) may be underestimated given that African American/Black Caribbeans may not disclose their depressive symptoms and could face additional risk due to the stresses of social-cultural exclusion while navigating the process of acculturation.

### **Help Seeking Disparities in the African American and Black Caribbean Communities**

Using the National Survey of American Life, Williams and colleagues (2007) provided a glimpse of the heterogeneity of the Black population in the United States, particularly in terms of mental health. More specifically, the researchers were able to find a difference in the mental health risk profile of Black Caribbeans from that of other African Americans noting that Black Caribbeans at risk for negative mental health outcomes. While their research provides a valuable understanding of at-risk Black Caribbeans, it seems that more specific information regarding the interpretation of mental health in the Black Caribbean population is still unclear. This may be a function of research that has not focused specifically on the population and their wellness, or non-disclosure of the experience of mental health difficulties from Black Caribbeans. In general, there remains a significant need to gain more information about the manifestations of depression in racial-ethnic communities. Sohail, Bailey, and Richie (2014) addressed the paucity of research examining depression in the Black/African American community and sought to encourage future researchers to examine how social support systems, acculturation processes and psychological functioning could improve the mental health of the Black/African American population, including Black Caribbeans. This study will attempt to address similar concerns within the Black Caribbean community.

### **Satisfaction with Life (SWL)**

One of the most heavily studied concepts in psychology is satisfaction with life. It has been viewed as an important factor in social networking and motivates on-line communication (Wang, Gaskin, & Liu, 2016), career choices (Duffy & Sedlacek, 2010) across a variety of sample populations. Notably, SWL can play an important role for Black/African Americans. For example, SWL has been found to help Black college students cope with race-related stress and positively impact their instillation of hope (Danoff-Burg, Prelow, & Swenson, 2004). Given the positive notoriety that SWL has received through its research outcomes, it is important to examine this highly studied construct with a severely understudied population like Black Caribbeans. Studying this construct will help gain an understanding of *their* expression, interpretation and factors that can influence their SWL. The oversight in research may have come from research focusing on the relationship between post migration experiences of Black Caribbeans and their relationships with kin at home, and not so much their establishment within a new cultural society.

So far, both religiosity and spirituality have been linked to well-being (or satisfaction with life) (Hill & Pargament, 2008), with the distinction being that religiosity refers to a specific religion, whereas spirituality can refer to a wide variety of concepts, such as a relationship with higher power/s or a feeling of connection to the universe. Eryilmaz's (2014) mixed methods study found that participation in religious activities were positively related to the subjective wellbeing. The qualitative component of the study also revealed that spirituality was associated with life satisfaction as responses included the following: "Believing in a Supreme Being gives me the sense of security, because I don't feel alone in this gigantic space despite its awesomeness"; "Knowing that someone high above is always behind me is what feeds me with power and makes me feel secure"; "Knowing that I have someone in whom I can always have

absolute trust makes me feel very happy.”; and “Asking a Supreme Being helps me keep believing and hoping that my requests will be answered someday”. These responses indicate a rather subjective experience of SWL and the important part that religiosity can play in contributing to SWL.

Similar findings have emerged nationally (Pearce, Little, & Perez 2003), where adolescents and adults incorporate different aspects of religiosity to promote satisfaction within their lives. Although the Pearce et al. (2003) study contained a subset of African Americans, past research in this area that has not accounted for within group variation within Black samples, thus to date it often remains unknown whether Black Caribbeans have been included in prior studies. Therefore, it is possible that this association also exists for the Black Caribbeans who continue to engage in religious activity post migration. Historically, for Black Caribbean migrants, their early sources of social support may initially derive from one source (family members living back on the island); but with time, their supports often extend to other sources within their new communities as they develop more relationships and connections with their co-workers, fellow students and church members.

A comparison study examining life satisfaction among Caribbean (Aruba and St. Lucia; still living on those islands) and U.S. youth revealed notable distinctions in life satisfaction (Morris, Martin, Hopson & Welch-Murphy, 2010). A clear indication of social support and level of importance was attributed to family, faith (God) and friends in that order was present for Caribbean youth. Compared to U.S. youth, Caribbean youth appeared to be more optimistic, even though there were no differences between their reports of subjective well-being and SWL. In addition, U.S. students reported more than twice the number of depressive symptoms than reported by Caribbean students, with no differences in depressive symptoms between the two

islands. Additionally, Lincoln and Chae (2012) noted evidence of underreporting of negative affect in Caribbean Blacks and African Americans. This makes addressing depression among Black Caribbeans particularly important, given that social desirability may have contributed to a reluctance to respond truthfully of present depressive symptoms.

### **Social Support**

Social support has been defined as being a complex multidimensional construct often confused with terms as social networks and social integration (Manning-Walsh, 2005; Pachana, Smith, Watson, McLaughlin & Dobson, 2008). Social support has also been conceptualized as the interactive process whereby help is obtained during a crisis *from* a social network, typically families and friends (House, Kahn, McLeod & Williams, 1985). The benefits of social support have been widely studied across multiple continents, level of functioning, and various populations in Asia (Axinn, Ghimire, Williams, Scott, 2015), Africa (Hamren, Chungkham, & Hyde, 2015), and in Australia (Briffa, Davidson, & Ferndale, 2016).

The link between social support and mental health is a particularly important concern for Black/African Americans and Black Caribbeans, given the complex social relationships between the two communities (Taylor, Chae, Lincoln, & Chatters, 2015). For Black Caribbeans in the United States, their social networks tend to consist of family and friends (Taylor et al., 2015). Family and kinship relationships have been found to be instrumental for their process of ethnic identity formation (Waters, 1999) and preservation of cultural values and traits (Lincoln et al., 2013). Despite leaving the Caribbean, settling in multi-ethnic and racially mixed neighborhoods, and creating multiethnic families, Black Caribbean people tend to maintain close relationships with other persons of Caribbean background (Reynolds, 2007; 2012). This could mean that Black Caribbeans may seek out persons/friends of similar cultural backgrounds (e.g., the

Black/African American community) and values as a means of social support post-migration. Social support is so important in the Black/African American community that three out of four African Americans have reported receiving social support from family on a frequent basis (Lincoln & Chae, 2012).

### **Buffering Role of Social Support on Psychological Outcomes**

There is a great deal of evidence that points to the buffering effects of social support in the relationship between unhealthy stressors and various psychological outcomes. For example, social support has been found to buffer the negative impact of depressive symptoms on burnout on well-being among teachers (Pozo-Muñoz, Salvador-Ferrer, Alonso-Morillejo, & Martos-Mendez, 2008), and the impact of stress on the well-being and sense of community among rural men (Kutek, Turnbull, & Fairweather-Schmidt, 2011). Furthermore, social support has been found to moderate the influence of acculturative stress on psychological health among refugees and asylum seekers, such that social support (from sponsors) improved the psychological health and adaptation of the participants over time, in the face of acculturative stress (Renner et al., 2012).

More recently, the presence of social support has been evidenced to provide a buffer against depressive symptoms in a sample of Japanese gerontological adults (Tsuboi, Hirai, & Kondo, 2016), moderated PTSD and depression symptom severity in veterans (Painter, Gray, McGinn, Mostoufi, & Hoerster, 2016) and moderated depression in adolescents (Rueger, Malecki, Pyun, Aycocock, & Coyle, 2016). Previous studies have found that a higher level of social and familial support was associated with a lower incidence of depression. For instance, although physical or emotional separation from family is associated with a greater susceptibility to the consequences of stress, having a strong confidante in one's social network that can provide

emotional support is sufficient to mitigate the symptoms of depression and anxiety (Merz, Oort, Ozeke-Kocabas, & Schuengel, 2009; Park & Bernstein, 2008).

Underscored in the study is that social support among ethnic groups, included multiple helpers such as extended family, spouses or significant others included), friends, neighbors, and members of religious organizations. This study did not look at the different types of social support within this population but highlighted its overall contribution to (mental) health within the Black Caribbean post migration experience.

### **Religiosity**

Religiosity is a multidimensional construct and is defined as having several dimensions associated with religious beliefs (Bergan & McConatha, 2000). Historically, research has conceptualized religiosity as a unidimensional concept affiliated with religious or church attendance. As a narrow conceptualization, this view of religiosity does not necessarily apply to all populations, especially for persons who do not engage in organized religious activity. For some populations, private devotions, prayer and a strong belief system is a more accurate measure of *their* religiosity (Kristensen, Pedersen, & Williams, 2001). Religiosity can be further defined as “ways of relating to the sacred” where the term “sacred” refers to persons/objects of devotion and truth including personal divine beings (Hill & Pargament, 2003.).

It is important to address the similarity between spirituality and religiosity. Berkel, Armstrong, and Cokley (2004) noted the inconsistency in providing a distinction of the two constructs. In studies religion seemed to involve closeness to God or a higher power and encourages a deeper understanding of one’s relationship with others, whereas spirituality is more personal and seeks to appreciate the meaning about the relationship with God or a higher power and can potentially lead to religious development. The current study will look at organizational

religiosity (participation in formal religious activities such as church attendance, prayer meetings), non-organized religiosity (informal practices as prayer and scripture reading), and intrinsic religiosity (personal religiousness, reflection, the effect of religiosity in one's interaction with others). While certain aspects of religiosity may *be perceived* as spirituality to the reader, all descriptors are used to draw attention to religiosity as a multidimensional construct.

Religiosity and religious practices are fundamentally depictions of piety and goodness; however, religiosity has historically been explored as an abnormal phenomenon (Crossley, 1995; Johnson, 1994). This is particularly important to acknowledge, given that some religious practices in the Caribbean have been deemed to resemble ritualistic and sacrificial practices, like Obeah (see Ellis, 2015, for an explanation of Obeah) and Santeria (see Iglesias, 2006 for a look at Santeria). Practices of this sort, while severely misunderstood and demonized, are valid religious practices and are important aspects of religious involvement in the lives of the Black Caribbeans, even post migration.

### **Significance of Religiosity to Black Caribbeans and Black/African Americans**

Along with social support, religiosity is an important fixture in the Black/African American and Black Caribbean community when coping with racial discrimination (Hayward & Krause, 2015). Black Caribbeans and Black/African Americans share several social experiences, which may result in similar levels of religious commitment. Religious commitment may help manage a shared history of encounters with racial prejudice and discrimination in the areas of employment, housing, education, and health care. To combat experiences of prejudice and hatred, Black/African American and Black Caribbeans may turn to religiosity as a means of coping (Levine et al., 2015).

While differences do exist between Black/African American and Black Caribbeans, the commonality in these religious experiences may contribute to Black Caribbeans' need to rely on religiosity in a manner comparable with Black/African Americans (Brown, Taylor & Chatters, 2015). Black Caribbeans and Black/African Americans report similar levels of prayer and looking to God for strength when dealing with hardships (Chatters et al., 2008), with both groups endorse reliance on religious resources when enduring stress more than their White majority counterparts (Chatters et al., 2008). Along these lines, like Black/African Americans, Black Caribbean are more likely than Whites to attend worship services and are more active in their places of worship (Chatters, Taylor, Bullard & Jackson, 2009; Koenig, McCullough & Larson, 2001).

One possible reason for the similar utility of religiosity as coping for Black Caribbean and Black/African Americans could be their shared experience of discrimination. Hayward and Krause (2015) determined that religiosity provided beneficial discrimination coping strategies for Black/African American and Caribbean Blacks, one form being prayer. Their finding that church-based social support was related to greater use of passive coping, and negative church-based interaction was related to greater self-blame helped the authors better conceptualize religiosity's ability to buffer some of the psychological effects of experiencing discrimination (Ellison, Musick & Henderson, 2008). They determined that if religious factors promoted the use of more adaptive coping strategies for dealing with discrimination, then by extension it should also help reduce the impact of discrimination. Conclusively, given their similar experiences with oppression and the protective role of religiosity, it appears that Black Caribbeans' patterns of religious involvement are not different from that of Black/African Americans.

## **The Beneficial Role of Religiosity in Mental Health**

Religiosity, regardless of its configuration, has many protective qualities. In several studies, researchers have found that religiosity can guard against depression. For example, in a study with a sample of homesick college students, religiosity was found to buffer the effects of depression for some students (Longo & Kim-Spoon, 2013). Results of a meta-analysis indicated that greater religiosity was associated with fewer symptoms of depression (Smith, McCulloch, & Poll, 2003). Both trust in God and positive religious coping has been found to correlate with lower levels of depressive symptoms in a sample of Jews living in the United States (Krumrei, Pirutinsky, & Rosmarin, 2013). Similar findings were discovered in studies that have examined the relationship between religiosity and overall mental health (Hackney & Sanders 2003). Additionally, another study with a sample of older Korean immigrants demonstrated that patterns of religiosity were involved in effectively managing depression and enhancing SWL (Roh, Lee, Lee, & Martin, 2014). In addition, in a sample of African American versus Anglo-American men, Walker (2003) found that acculturative stress and ethnic identity served as risk factors for suicidal ideation, whereas social support and religiosity provided a moderating effect in these relations. Walker found that in the absence of strong religiosity, African American men reported greater acculturative stress, had low levels of ethnic identity, and were more prone to suicidal ideation. These studies buttress the viability of the moderating properties of religiosity and its protectiveness against acculturative stress and other negative mental health outcomes.

Similarly, religiosity has also been found to play an important part in the well-being of Black Caribbeans' lives, specifically, as they are more likely to endorse the opinion that prayer, a component of religious practicing, is important when dealing with stressful situations (Chatters et al., 2008). In a study that looked at religious coping as a moderator on acculturative stress and

psychological outcomes, Superville (2015) determined that religiosity remained important for Black Caribbeans post migration, and that religious coping, global stress, and acculturative stress were significant predictors of psychological outcomes. These findings suggest that religious coping orientations and strategies are salient aspects of Black Caribbeans' lives. Additionally, recognizing the specific type of participants' religious involvement can help identify which experiences of religiosity are most meaningful. For example, institutional forms of religion (organized religion) have been found to be less related to psychological adjustment than a more intrinsic, personal devotion to religion (Hackney & Sanders 2003).

### **Acculturation**

Moving to a new place can be inherently anxiety provoking and stressful (Schwartz et al., 2013), even if/when the move has included preparation and forethought. As time progresses, migrants may experience an acculturative process, or an organic emotional shift, where to appear as a native, they conduct themselves in the manner prescribed by the current society (e.g. dress, language, behaviors). According to Sam and Berry (2010), contact between cultural populations provides a major source of the development and display of human behavior; acculturation contributes to that development.

Acculturation has been considered the process of cultural and psychological change that results following the meeting between cultures. Early descriptions of acculturation have been documented as “phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups” (Redfield, Linton, & Herskovits). In 1964, Gordon likened the process to immigrants' acquisition of practices of a new culture, while simultaneously discarding the practices of their own cultural heritage. For West Indian immigrants, Kasinitz, Mollenkopf and

Waters (2002) specifically raised an important question regarding their ability to maintain their unique ethnic or national origin identity post migration or whether they “fade to Black” and become African American. Possibly for protective purposes, Waters et al. (2014) noted that prior to the Civil Rights Movement of the 1960’s and the mass migration of other West Indians in the 1970’s to 1980’s, most West Indians who resided in the United States identified as Black/African Americans. Recently, many Black Caribbeans have claimed both an ethnic and racial identity that is more closely related to their place of birth or cultural connection, thus reclaiming and maintaining an ethnic identity salient to them.

Joseph, Watson, Wang, Case and Hunter (2013) noted that the cultural context in the United States is highly racialized and has direct influence on the acculturation process of Black Caribbeans. Accounting for the influence of living in a highly racialized society is especially relevant in understanding the acculturative process of Black Caribbean immigrants because they are often classified as Black/African American based on their racial similarities; yet they are ethnically different. Given that their ethnic group is not African American, Black Caribbeans may perceive the need to be flexible in the degree to which they can engage indiscernibly with African American culture; when it seems appropriate to fit in, Black Caribbeans may “act” like African Americans, but when around other Black Caribbeans, they may revert to their cultural diction and behaviors.

Indeed, the extent to which Black Caribbean migrants engage in Black/African American culture may be influenced by their beliefs concerning whether the outcome of their engagement or interactions will be advantageous or detrimental. For instance, by becoming socially involved with Black/African Americans, Black Caribbeans may learn adaptive strategies for managing experiences of racial discrimination (Vickerman, 1994). However, Black Caribbean immigrants

may purposely avoid engaging in Black/African American culture to evade socially locating themselves within a marginalized and disadvantaged group (Waters et al., 2014). Thus, due to the prominent role of race and racial stratification in the United States, Black Caribbean migrants may incur beneficial or unfavorable consequences if they engage in Black/African American culture. Hesitation to engage in Black/African American culture may serve as a protective factor that can help maintain the “model minority myth” (Thorton et al., 2013). Based on the “immigration paradox”, the model minority myth suggests that, despite being foreign born, many Black Caribbeans experience more success and out-perform native born Whites and Black/African Americans, all while experiencing discrimination and social and economic disadvantages as immigrants.

### **Summary and Purpose of the Study**

The study examined the post-migration experiences of Black Caribbeans and specifically evaluated the connection between their experiences with acculturative stress and psychological outcomes. In addition, a major objective was to examine protective factors that Black Caribbeans may utilize post migration, specifically their reliance on social support and religiosity to help buffer some of the negative experiences of acculturative stress. Although social support and religiosity have been observed as having a protective role on SWL in the Black/African American community, research focusing solely on the Black Caribbean immigrant population (as part of the larger Black American community) is very sparse; and while some research on Black/African Americans has included Black Caribbeans, immigrants can have unique and different experiences than those of Black/African Americans, especially with regards to adjustment and well-being. Therefore, a general goal of this study is to add to the lack of research by exclusively focusing on Black Caribbean immigrants.

Using an ecological systems framework (Bronfenbrenner, 1979), this study assessed the relationship between acculturative stress and SWL, and acculturative stress and depression among a sample of Black Caribbean immigrants. The study addressed protective factors that could potentially buffer the aforementioned relationships, including social support and religiosity. Religiosity was conceptualized as multidimensional and represented three separate, but related constructs: intrinsic religiosity, organized religiosity, and non-organized religiosity. Given that the trajectory of immigration suggests that Black Caribbeans will eventually settle in across all states in America (Migration Policy Institute) tabulation of data from U.S. Census Bureau pooled 2010-14), results of this study are important to gain insight into the well-being and life satisfaction of Black Caribbeans who are adjusting to life in the United States. In doing so, researchers are better able to understand this population, identify their unique challenges, and highlight the ways that counseling psychologists, policy makers, community organizations and academicians may support Black Caribbeans.

## CHAPTER 3

### METHODOLOGY

#### **Participants and Sampling**

The statistical software G\*Power (Faul, Lang, & Buckner, 2007) was used to conduct an a priori power analysis to determine adequate sample size for a study that would utilize multiple regression analysis to achieve a medium effect size in terms of total variance explained ( $f^2=.15 - .20$ ). Appropriate sample size was calculated considering a type I error level of  $\alpha = .05$  and power of .90 and assumed the use of 16 predictors including interactions. Predictors and interactions included acculturation, acculturative stress, social support, religiosity (three sub-constructs of intrinsic, organized and non-organized religious activity), interactions of Social support  $\times$  Acculturative stress, all three sub-constructs of religiosity  $\times$  Acculturative stress (Intrinsic religiosity  $\times$  Acculturative stress, Organized religious activities  $\times$  Acculturative stress, Non-organized religious activities  $\times$  Acculturative stress), and an anticipated 6 demographic control variables based on the results of bivariate descriptive analyses. The suggested sample size was 135 to 170. In total, data were collected from 170 participants, with 124 of those participants having complete data. Further explanation of the exclusion process is detailed in a future section.

Sensitivity analyses of the sample size was conducted to determine whether the sample size provided sufficient power to detect meaningful effects. Assuming a type I error level of  $\alpha = .05$  and power of .90, the use of 9 predictors including interactions in the most complex model run, the power analysis indicated that the sample size was sufficient to detect small to medium effects ( $f^2=.17$ ; Cohen, 1992).

Internet resources (i.e. Facebook, Listservs, organizations and persons affiliated with Black Caribbeans) were used to recruit participants. Listservs provided a convenience sample of undergraduate and or/graduate students and professionals. Facebook and (other) social media advertising relied on snowball sampling where participants were asked to forward the survey to others who qualified as participants (even if they had chosen not to participate themselves). The benefit of using varied sampling methods allowed me to recruit a sample that represented a wide range of ages, personal exposure to mental health, levels of religious involvement, experience of social support, income brackets and acculturation time. This recruitment method was crucial in that most exploratory research studies have gravitated towards convenience samples of college students; it was important to include the community members as the results of this endeavor will help inform mental health assistance for Black Caribbeans post migration in different settings and across different age groups (e.g., students, working class, retired).

To be eligible for this study, participants had to be at least 18 years old, born on one of the proposed Black/English speaking Caribbean countries and had to have lived there for a minimum of eight consecutive years (see Appendix A/Demographic form for list of countries). Black/African Americans, (i.e., individuals of African descent who were born in the United States), other persons of the African diaspora not included in the listed islands, second-generation Black Caribbean(s) (i.e. persons born in the United States to parents who were born on the listed islands), and persons born in the United States Virgin Islands and Puerto Rico were not permitted to participate and were excluded from this sample.

### **Sample Characteristics**

The sample consisted of 22.8% ( $n=27$ ) men participants and 77.4 % ( $n=96$ ) women participants. One person did not provide gender identification. Important statistics to highlight

included 92.7% ( $n=115$ ) self-identified as heterosexuals. In terms of participants 'country/island of origin, there were 10 islands represented with 37.9 % ( $n=47$ ) from the island of Dominica, 20.2% ( $n=25$ ) from Jamaica, 19.4% ( $n=24$ ) from Saint Kitts and Nevis and 16.1% ( $n=20$ ) from Trinidad and Tobago. Most of the participants resided in Florida and accounted for 28.2 % ( $n=35$ ). New York ( $n=14$ ) accounted for 11.3% and Texas ( $n=12$ ) accounted for 9.7%. Fifty-three participants (42.7%) migrated between the ages of 20-30, 47.6 % ( $n =59$ ) have achieved a graduate degree and more than half (57.3%) earn more than \$60,000 annually ( $n=71$ ). With regards to religiosity and religious affiliations 65.3% ( $n=81$ ) confirmed engagement in religious activities, with Protestant/Christianity and Catholicism having similar top percentages at 39.5% ( $n=49$ ) for religious affiliations. Table 1 provides complete statistics for the demographic variables.

**Table 1: Descriptive Statistics of Participant Characteristics**

	<i>n</i>	%
Gender		
Men	27	21.8
Women	96	77.4
Did not identify gender	1	.8
Age		
18-25	4	3.2
26-30	6	4.8
31-35	16	12.9
36-40	30	24.2
41-45	37	29.8
46-50	13	10.5
51+	18	14.5
Sexual Orientation		
Heterosexual	115	92.7
Gay/Lesbian	5	4.0
Bisexual	2	1.6
Self-identified	2	1.6
Highest Level of Education Completed		
Some High School	2	1.6
High school diploma /CXC/GCE/CSEC	3	2.4
GED	1	.8
Some college	10	8.1
Associates degree	11	8.9
Undergraduate/Bachelor's degree	33	26.6
Graduate degree(s)	59	47.6

Self-described	5	4
Annual Income		
Less than 20, 000	9	7.3
20,000-40,000	17	13.7
40,001-60,000	27	21.8
60,000-80,000	29	23.4
More than 80,000	42	33.9
Country/Island of Origin		
Belize	1	.8
Anguilla	1	.8
British Virgin Islands	1	.8
Dominica	47	37.9
St. Kitts and Nevis	24	19.4
Barbados	1	8
St. Vincent and the Grenadines	2	1.6
Guyana	2	1.6
Jamaica	25	20.2
Trinidad and Tobago	20	16.1
Age of migration		
0-10	14	11.3
10-20	38	30.6
20-30	53	42.7
30-40	16	12.9
40+	3	2.4
Years lived in the United States		
1-5	8	6.5
6-10	11	8.9
11-15	17	13.7
16-20	25	20.2
21-25	32	25.8
25+	31	25
Do you attend Church services?		
Yes	88	71
No	36	29
Do you engage in religious activities		
Yes	81	65.3
No	42	33.9
No response	1	.8
What is your religious affiliation		
Judaism	1	.8
Catholicism	49	40.2
Protestant/Christianity	49	40.2
Rastafarianism	1	.8
No reply	2	1.6

Note:  $N = 124$

## Procedures

IRB approval was gained and ethical aspects involving non-human, de-identified participants were considered. Survey participants were provided a brief overview of the security of the survey, instructions of survey completion, potential risks and benefits, contact information for mental health support if needed. In addition, after completing the instruments, participants were invited to participate in a raffle to receive 1 of 10 Amazon gift cards (valued at \$20 dollars each). Participants were also reminded that they may discontinue the survey at any time without penalty.

## Measures

Participants were first asked to complete demographic questions followed by the survey measures that assessed the following constructs in order: Acculturative Stress, Depression, Acculturation, Social Support, Satisfaction with Life (SWL), and Religiosity. Means and standard deviations of measures is provided in Table 2. Participants were then directed to optional qualitative questions regarding their immigrant experiences (described below).

**Table 2: Means and Standard Deviations of Measures**

Measures	Measure Scores	
	M	SD
RASI	35.86	.96
MSPSS	68.90	1.22
DUREL-IR	11.67	3.54
DUREL-OR	3.60	1.42
DUREL-NOR	3.10	1.73
VIA	135.63	20.42
CES-D	36.52	6.61
SWLS	24.42	7.03

RASI=The Riverside Acculturation Stress Inventory; MSPSS Multidimensional Scale of Perceived Social Support; DUREL-IR= The Duke University Religiosity Index-Intrinsic Religiosity; OR- Organized Religiosity; NOR-Non-Organized Religiosity; VIA=The Vancouver Index of Acculturation; CES-D=Center for Epidemiological Studies Depression Scale; SWLS= The Satisfaction With Life Scale

## **Demographics**

Questions about participant demographics (see Appendix A) requested participants to voluntarily identify their age, gender, sexual orientation, level of completed education, income, island of origin, current state where they reside, age of migration, length of time living in the United States, religious engagement and affiliation.

## **Acculturative Stress**

The Riverside Acculturation Stress Inventory ([RASI], Benet-Martinez & Haritatos, 2005) was developed to address acculturative stress in 5 domains (3 items each) of work challenges (e.g. having to work harder than non-immigrant or minority peers), language (this component was changed to reflect accent), intercultural relations (e.g., having disagreements with others for behaving in ways that are “too American” or “too ethnic”), discrimination (e.g., being mistreated because of one’s ethnicity), and cultural/ethnic makeup of the community (e.g., living in an environment that is not culturally diverse) (Benet-Martinez & Haritatos, 2005).

Furthermore, the non-ethnic group specific nature of the RASI makes it useable with diverse populations (Miller, Kim, & Benet-Martinez, 2011). Each item of the RASI is answered using a scale that ranges from 1 (*strongly disagree*) to 5 (*strongly agree*). Total scores can range from 15 to 75, with domain scores ranging from 3 to 15. Higher scores indicate greater experiences of acculturative stress with lower scores indicative of less experiences of acculturative stress.

A 3-part validation study with a sample of Asian Americans (Miller, Kim & Benet-Martinez, 2011) determined a higher order factor structure of the RASI as a unidimensional and multidimensional assessment of acculturative stress, as well as established both validity and internal consistency. Reliability estimates for one of the studies were language skills ( $\alpha=.80$ ), discrimination ( $\alpha=.84$ ), intercultural relations ( $\alpha=.71$ ), cultural isolation ( $\alpha=.72$ ), and work

challenges subscales, with a total score reliability of  $\alpha = .84$ . The authors also observed an average subscale correlation of  $r = .23$  ( $r$  range = .04 – .52), which supported the assertion that the proposed domains were distinct but related components of a broader higher order acculturative stress construct.

Interestingly, Miller et al. (2011) exploration of a one-factor model of acculturative stress resulted in poor model fit, but a good model fit for a first order 5-factor model. With this study, reliability of the overall measure of acculturative stress was  $\alpha = .82$  and subscale reliability statistics ranged from unacceptable to good ( $\alpha = .45$  for intercultural relations,  $\alpha = .55$  for work challenges,  $\alpha = .56$  for cultural isolation,  $\alpha = .70$  for discrimination, and  $\alpha = .70$  for language skills), suggesting better fit of an overall measure of acculturative stress rather than dimensions. Therefore, acculturative stress in this study was looked at as one dimension. This is counter to Miller and colleagues' (2011) findings, which suggested that acculturative stress is a broad process occurring within specific domains.

## **Depression**

Depression was assessed by the 20-item Center for Epidemiological Studies Depression Scale ([CES-D]: Radloff, 1977). The CES-D Scale is a self-report screening tool for depressive symptoms developed for epidemiologic studies by the National Institute of Mental Health (Radloff, 1977). Torres (2012) determined that this scale is an adequate measure for persons of different ethnic backgrounds, as depressive symptomatology seems not to deviate from symptoms assessed in this measure and can therefore be assessed uniformly by this measure.

The 20 items measure the following domains: trouble in keeping one's mind on tasks, enjoying life, crying spells, difficulty get going, feeling depressed, hopefulness, restlessness, happiness, self-worth, feeling that everything they did required effort, people's unfriendliness,

and that people dislike them. Respondents were asked to indicate how often (within the last week) they experienced each listed symptom by using a four-point scale (0=*rarely or none of the time*, 1=*some or a little of the time*, 2=*occasionally or a moderate amount of time*, or 3=*most or all of the time*). In most studies, researchers employ a total scale score summing the responses of all 20 four-point items (e.g., Ensel & Lin, 1991). The resulting scores have a potential range of 0 to 60 but tend to be skewed positively in non-psychiatric populations, with most respondents scoring in the lower ranges and mean scale scores not exceeding 10 in the general population (Devins & Orme, 1985).

In a study looking at the impact of neighborhood quality and social support on depressive symptoms of pregnant African American women, internal consistency reliability of the 20-item CES-D measure was  $\alpha=.85$  (Giurgescu et al., 2015). Among suicide attempters and a control group in rural China, Yang, Jia, and Qin (2015) found that the CES-D had Cronbach's alpha values of  $\alpha=.94$  and  $\alpha=0.90$ , respectively in suicide attempters and comparison residents. CES-D scores were significantly correlated with the scores of Trait Anxiety Inventory and Beck Hopelessness Scale in both the suicide attempters and the comparison residents and deemed to have satisfactory reliability and validity within their sample.

Cronbach's  $\alpha$  within this sample was  $\alpha=.66$ , which is nearing an acceptable range of reliability. The entire measure was retained, and a total score was calculated as a global assessment of depression.

### **Acculturation**

The Vancouver Index of Acculturation ([VIA]; Ryder et al., 2000) is a 20-item instrument designed to measure acculturation via two subscales: Independent heritage/culture and Mainstream heritage/culture. Each item is rated on a 9-point Likert scale such that responses

range from 1 (*strongly disagree*) to 9 (*strongly agree*). Items are presented in content-based pairs, with one item in each pair referring to the heritage culture and the other referring to mainstream culture specified as North American. (For the purpose of this study, mainstream was identified as “American”). Each of the 10-item pairs assessed a domain relevant to acculturation, namely traditions, marriage, social activities, comfort with people, entertainment, behavior, practices, values, humor, and friends. The heritage sub-score is the mean of the odd-numbered items, whereas the mainstream sub-score is the mean of the even-numbered items. The score for each VIA dimension is obtained by averaging responses; hence, scores range from 1 (*low heritage or mainstream culture orientation*) to 9 (*high heritage or mainstream culture orientation*). A higher mean score on each subscale indicates a greater degree of acculturation to that culture.

In a study conducted by Ryder, Alden, Paulhus, and Dere (2013) with a Chinese Canadian sample, the heritage and mainstream subscales were shown to have reliability estimates of  $\alpha = .85$  and  $\alpha = .91$ , respectively. In another study (Sood, Mendez, & Kendall, 2012) the measure produced scores that demonstrated excellent internal consistency (VIA-Mainstream  $\alpha = .85$  to  $\alpha = .89$ ; VIA-Heritage  $\alpha = .91$  to  $\alpha = .92$ ) and high mean inter-item correlations (VIA-M  $r_s \alpha = .38$  to  $\alpha = .45$ ; VIA-H  $r_s \alpha = .51$  to  $\alpha = .53$ ) in a sample of Indian American, Puerto Rican, and European American mothers, which suggests that one advantage of the VIA is not better items but wider coverage of the culture domain. During construction of the measure to determine a bidimensional construct of acculturation Ryder et al. (2000) conducted their study with participants who had Chinese ancestry. Concurrent validity was demonstrated as percentage of time living in North America was significantly associated with both the Heritage and Mainstream subscales ( $r_s = -.27$  and  $.53$ , respectively,  $p < .001$ ). Convergent validity was

determined as the Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Ahuna, & Khoo, 1992; Suinn, Rickard, Figueroa, Lew, & Vigil, 1987) was significantly associated with both the Heritage and Mainstream subscales ( $r_s = -.46$  and  $.55$ , respectively,  $p < .001$ ).

Statistics of reliability for the present study were good both for an overall measure of acculturation (Cronbach's  $\alpha = .84$ ) as well as measure of mainstream domain of acculturation (Cronbach's  $\alpha = .87$ ) and heritage domain of acculturation (Cronbach's  $\alpha = .85$ ). Even though studies tend to use the measure to capture both heritage and mainstream dimensions of acculturation, this study used the measu

re as an overall assessment of acculturation as a control variable. The VIA is designed to measure acculturation regardless of country of origin and is therefore a suitable measure to be used with Black Caribbeans.

### **Social Support**

Social support was assessed by the Multidimensional Scale of Perceived Social Support ([MSPSS], Zimet, Dahlem, Zimet, & Farley, 1998). The scale has been translated into many different languages and used to determine levels of support in different cultures (see Bagherian-Sararoudi, Haijan, Eshan, Sarafraz & Zimet, 2013; Ekbäck, Benzein, Lindberg, & Årestedt, 2013; Guan et al., 2013).

The measure is comprised of three subscales (family, friends and significant other or special person), all consisting of 4 items. Responses are scored on a 7- point Likert scale continuum, ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). Subscale scores are calculated by combining the total responses in each subscale. Total score ranges from 4 to 28. The total score, which could range from 12 to 84, combines the three subscale scores to provide an overall scale score. Higher scores in the subscales and combined scores indicate higher levels

of perceived social support. Examples of items are, “My family really tries to help me” (Family subscale), “I can count on my friends when things go wrong” (Friends subscale), and “There is a special person with whom I can share my joys and sorrows” (Significant other subscale).

Zimet et al. (1988) reported internal consistency reliability coefficients of  $\alpha=.87$  (Family),  $\alpha=.85$  (Friends), and  $\alpha=.91$  (Significant other) for the 4-item subscales. The 12-item total score produced an acceptable estimate of internal consistency ( $\alpha=.88$ ).

Additionally, Canty-Mitchell and Zimet (2000) found this scale to be a reliable measure for use within an African American adolescent sample. The internal reliability coefficient alphas for the African American adolescent sample on family, friends, and significant other were  $\alpha=.91$ ,  $\alpha=.89$ , and  $\alpha=.91$ , respectively. The entire 12-item scale had a Cronbach’s  $\alpha$  of  $.93$ . Zemit et al (1998) found that perceived social support was negatively associated with anxiety and depression, providing evidence of concurrent validity. Convergent validity of the MSPSS was demonstrated in a recent study of Columbian adolescents, which found significant correlations between the family and friends subscales of the MSPSS and corresponding subscales of the Family and Cohesion Adaptation Subscales (Trejos-Herrera, Bahamón, Alarcón-Vásquez, Véleza, & Vinaccia, 2018).

The measure has demonstrated that it can be used to assess overall social support or via the constructs/subscales outline. With this sample, Cronbach’s  $\alpha$  was  $.92$ , with subscales showing similar good to excellent reliability of  $\alpha=.88$  for the Family subscale,  $\alpha=.92$  for Significant other, and  $\alpha=.93$  for the Friends subscale. This study examined overall total social support scores rather than dimension totals.

## **Satisfaction with Life (SWL)**

The SWL Scale (SWLS) is a commonly used measure to assess global SWL. It was developed and validated using samples of college students and senior citizens (Diener, Emmons, Larson, & Griffin, 1985). This scale consists of five positively phrased statements, such as, “The conditions of my life are excellent,” and, “If I could live my life over, I would change almost nothing.” Respondents indicated the extent to which they agree or disagree with each statement by using a scale ranging from 1 (*strongly disagree*) through 7 (*strongly agree*). Scores are obtained by averaging responses for each item. Average scores on this measure ranged from 1 to 7, with 7 representing a high level of global life satisfaction. The SWLS has been shown to have high internal consistency, reliability, and predictive validity, and is correlated with other measures of subjective well-being, such as the Rosenberg Self-Esteem Scale, the General Health Questionnaire, and the SCL-90 (Arrindell, Meeuwesen, & Huyse, 1991). The SWLS has demonstrated strong internal consistency with alphas ranging from  $\alpha=.83$  to  $\alpha=.85$ , with 2-week and 1-month test-retest coefficients of .84 (Pavot, Diener, Colvin & Sandvik, 1991). In a sample of Black Caribbeans Cronbach’s alpha, was  $\alpha=.86$  (Murphy & Mahalingam, 2006).

Across numerous studies, researchers have established the cross-method convergent validity of the SWLS because of its correlations with a variety of other well-being measures, as well as its lack of association with gender and social desirability (Diener et al., 1985; Lewis, Shevlin, Bunting, & Joseph, 1995). This past research helps confirm that the measure may not be invalidated by gender effects. Additionally, the validity of the SWLS has been demonstrated across college students, adolescents, older adults, and among diverse populations (Durak, Senol-Durak, & Gencoz (2010); Swami & Chamorro-Premuzic, 2009). The present study sample had good reliability of  $\alpha=.89$ , nearing excellent reliability.

## **Religiosity**

The Duke University Religiosity Index ([DUREL]; Koenig et al., 1997) is a five-item religious involvement measure, used in epidemiological studies. Even though the measure is very short, it manages to address three major dimensions of religiosity, including organizational religious activity, non-organizational religious activity, and intrinsic religiosity (Koenig & Bussing 2010). The Organizational religious activity measure is a single item and it assesses the frequency with which a person attends ritual activities of church or religious institutions. The Non-organizational religious activity measure is also a single item and it assesses how much an individual spends time for religious notated activities such as prayer, watching or listening to religious TV or radio, or Bible study. The Intrinsic religiosity subscale, which consists of 3 items, measures personal experience with the Divine (Koenig et al. 1997) including how a person's religiousness affects their approach to life and interactions with others. Intrinsic religiosity has been used as a proxy for spirituality and defined as such in several clinical trials and many rigorous studies of religiosity/spirituality and health and has been validated as a measurement tool in different ethnicities and faith groups (Koenig et al., 2012).

Additionally, Koenig et al. (2012) reported that the DUREL has produced scores that demonstrate high test-retest reliability (.91) over a 2-week period (Storch, Strawser & Storch, 2004), high internal consistency (Cronbach's alphas  $\alpha=0.78$  to  $\alpha=.91$ ), and high convergent validity with other measures of religiosity ( $r =.71-.86$ ). Limited studies were available that could validate the use of this measure in a specific African American population to provide comparative or assumptive outcomes for the Black Caribbeans. Koenig and Bussing (2010) highlighted the design of the measure and its accuracy in measuring religiosity in Western religions (e.g. Christianity, Judaism, and Islam). Given most of church attending persons in the

Black Caribbean identify as some form of Christian (Allen & Khan, 2014) and given the use of this measure in epidemiological studies (Koenig & Büssing, 2010), the measure is considered at this point to be sound and reliable for use in this study.

One caution by the originators of the measure (Koenig et al. 1997) was that the measure should *not* be examined as an overall religiosity score and should be independently viewed in separate regression models to avoid multiple collinearity or possibly canceling the effects of each other. In the current sample, Cronbach's  $\alpha$  was .87 for the Intrinsic Religiosity subscale.

### **Optional Qualitative Questions**

At the end of the questionnaires participants were directed to the outlined questions about their immigrant experience (e.g., “Think about the things that have influenced you the most since you migrated to the United States; What has been most challenging about your experience as an immigrant?”). The questions (as was the entire study) was optional and participants did not have a limit on how much they could say in their responses. While this study was descriptive quantitative, the responses were examined to address any possible discrepancy in outcome of numerical data and help further understand the immigrant experiences of the sample. The responses were treated **only** as supplemental data and were not analyzed during the main analysis. They were included in post hoc and theoretical interpretation of the findings.

## CHAPTER 4

### RESULTS

#### **Data Preparation**

The study sample consisted of 146 participants who self-identified as Black Caribbean and met full criteria based on the study invitation. This number excludes persons who opened the survey but did not provide any responses or began the survey and completed demographic data but did not respond to any of the scale surveys (total  $N = 170$ ).

#### **Missing Data**

After conducting Little's MCAR test on the scores of all measures, it was determined that the SWL scores for some of the participants ( $n=22$ ) were not missing completely at random and would need to be excluded from the subsequent analysis altogether. The measures were not randomized and the SWL was the last measure of the surveys. It may be assumed that participants discontinued the survey prior to completion of the SWL scale. **All** responses were omitted for this single measure thereby making it difficult to predict what participants' answers may have been, therefore providing rationale for the removal of the twenty-two participants. Additional visual inspection of response patterns resulted in three participants being found to have completed 87% of the survey, which included all survey measures without optional qualitative responses. These participants were included in the analysis as they responded to the entire quantitative survey, although they did not share optional qualitative data.

After removing the participants who did not respond to any parts of the measure of SWLS, another missing data analysis was conducted on the remaining sample of the participants who were missing less than half of responses on all other measures within the survey. It is important to note that none of the measures were missing more than 3 responses per participant

and when Little's MCAR test was conducted on the items, the results yielded a non-significant chi-square ( $\chi^2 = 481.046$  ( $df = 481$ ),  $p = .49$ ), indicating that there was no evidence of patterns in the data and that item responses were missing completely at random. Predicted values were determined for the missing items in the scales through expectation maximization estimation, a step taken prior to analysis commencement. Altogether, 124 participants were retained for complete data analysis.

### **Factor Analysis**

With insufficient research on the post migration experiences of Black Caribbeans using these measures, it was important to conduct a factor analysis to explore the factor structures of these measures within this sample. Using exploratory factor analysis (EFA), the factor structures of the predictor (i.e., acculturation, acculturative stress, religiosity, and social support) and outcome variables (i.e., SWL, depression), were assessed.

The required number of participants for an effective EFA is 10 participants per item or 300 total participants minimum, even though factor recovery can be reliable with smaller sample sizes (de Winter, Dodou, & Wieringa, 2009). With a small sample size of 124, the power needed to assert a sound outcome was not present, given that 1 outlier in a small sample can unduly influence the entire model and factor structure. However, factor loadings may emerge even though the sample size is less than half of the required amount for EFA testing, keeping in mind that these EFAs were being used in an exploratory fashion to confirm suspected factor structures. Furthermore, assessing the factor structure with this unique sample of understudied participants made the EFAs more meaningful and necessary in order to determine whether the measures would "behave" similarly as with other majority populations and other research. Also, apart from the DUREL (measuring religiosity), the measures for the current study were being interpreted

globally and not dimensionally (even though some of the measures— i.e. depression, acculturation, acculturative stress, and social support have theorized multidimensional factors that may differ across populations and research contexts). Therefore, the EFA was mainly to confirm that the measures were accurate in their theorized utility.

Maximum likelihood estimation was used with Promax rotations (assuming that there may be correlations among the factors) for SWL, depression, acculturation, acculturative stress, and social support. Kaiser criterion, eigenvalues and scree plots were inspected to determine the number of factors to retain. Sampling adequacy (across variables) as noted by Kaiser–Meyer–Olkin (KMO) ranged from 0.75 to 0.87 (“middling to meritorious” Cerny & Kaiser, 1977), with all tests for sphericity yielding significant results ( $p < .05$ ) allowing the conclusion there was a significant difference in the variances. Measures explained between 50% to 80% of variance within their factor structures (see Table 2 for a detailed summary of the structural characteristics of measures). Overall, all study measures except for the measure of acculturation (VIA) produced the expected factor structures as observed in previous literature.

**Table 3. Structural Characteristics of Measures**

Measure	N	#of items	KMO	Bartlett’s Test	% Explained	#of Factors
DUREL-IR	124	3	.81	323.642	65	1
SWLS	124	5	.86	369.032	70	1
CES–D	124	20	.87	1194.603	79	4
MSPSS	124	12	.87	1078.639	58	3
VIA	124	20	.81	1232.252	62	4
RASI	124	15	.75	541.631	65	5

Note: DUREL-IR= The Duke University Religiosity Index-Intrinsic Religiosity; SWLS= The SWL Scale; CES–D=Center for Epidemiological Studies Depression Scale; MSPSS Multidimensional Scale of Perceived Social Support = VIA=The Vancouver Index of Acculturation RASI=The Riverside Acculturation Stress Inventory

**Normality testing**

Univariate and multivariate outliers were examined for each variable. Normality was assessed using Shapiro–Wilks test (Shapiro & Wilk, 1965), and a visual inspection of the

histograms and Q–Q plots was conducted. Scores indicating non–normality was depression which demonstrated positive skewness while SWL and social support demonstrated negative skewness. Normal distributions were observed in the scores on acculturative stress whereas the scores on acculturation were close to normally distributed. Variables with skewness (religiosity and acculturation) that did not fall between  $\pm 1.96$  were adjusted via a log transformation, bringing variables in question close to normal distribution. Transformations on depression scores were attempted but did not improve the normality of the measure. Therefore, this measure was left untransformed.

It is important to note that there was a ceiling effect observed with the measure of SWL where most persons endorsed higher levels of social support, resulting in a positive skew of the data. Therefore, social support was dichotomized via the median total score (71). Participants with a median score between 1 and 71 were determined to have “low” social support, and all other participants were determined to have “high” social support. While there were some outliers within the distributions, the outliers were such that they were not extremely different to other responses. They did not directly influence the analysis, nor did they further confound the normality of distribution. Other assumptions of linearity, homogeneity of variance and multicollinearity were upheld within the dataset.

### **Descriptive Statistics**

A correlation table is provided (Table 3) to observe associations among the study variables.

**Table 4. Correlations between study variables.**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.SWLS	1													
2.MSPSS	.44**	1												
3.RASI	-.11	-.16	1											
4.CES-D	-.45**	-.24**	.16	1										
5.VIA	.18*	.14	-.15	-.16	1									
6.IR	.07	.10	.16	-.09	.13	1								
7.NOR	.07	.11	.04	-.05	.14	.54**	1							
8.OR	.14	.10	.25**	-.05	.08	.57**	.43**	1						
9.Age	.14	.03	-.17	-.11	.02	.01	.14	-.03	1					
10.Gender	-.14	-.05	-.03	.03	-.13	.25**	.19*	.22*	.01	1				
11.Education	.09	-.05	.23**	-.05	.00	.07	.08	.23*	.02	.05	1			
12.Income	.34**	.20*	.21*	-.03	-.09	.30	.07	.19	.67	.04	.06	1		
13. Migration	-.05	-.27**	.21*	-.21	-.09	.14	-.01	.18*	.23*	.08	-.01	-.18*	1	
14. Religious activities	.02	-.05	-.22*	-.03	-.06	-.62**	-.43**	-.58**	.00	-.10	.20*	.11	-.03	1

Note: N=124. SWLS=The SWL Scale; MSPSS=Multidimensional Scale of Perceived Social Support; RASI=The Riverside Acculturation Stress Inventory; CES-D=Center for Epidemiological Studies Depression Scale; VIA=The Vancouver Index of Acculturation ;IR=Intrinsic Religiosity, OR=Organized Religiosity; NOR=Non-Organized Religiosity; Gender-0=male, 1=female;

\*\* Correlation is significant at the 0.01 level (2 tailed)

\*Correlation is significant at the 0.05 level (2 tailed)

## Main Analysis

### Hypothesis 1

Hypothesis 1 stated that participants who endorsed symptoms of acculturative stress would also report/experience symptoms of depression thereby providing evidence of a positive relationship between the two variables. The results of the Pearson's correlation analysis indicated a positive yet statistically non-significant relationship between depression and acculturative stress ( $r [124] = .16, p = .07$ ). Therefore, hypothesis 1 was not upheld.

### Hypothesis 2

Hypothesis 2 assumed that there would be a negative relationship between acculturative stress and SWL where more endorsed symptoms of acculturative stress would be indicative of less SWL. Like hypothesis 1, a Pearson correlation was used to determine the relationship. Results of the correlational analysis yielded a negative but statistically non-significant relationship between acculturative stress and SWL ( $r = [124] = -.11, p = .21$ ), thus failing to support hypothesis 2.

### Hypothesis 3

**Hypothesis 3a.** A hierarchical regression analysis was performed to assess whether the different dimensions of religiosity buffers the relationship between acculturative stress and SWL (hypothesis 3a). Prior to forming a product term to represent an interaction between acculturative stress and religiosity, scores on both variables were centered by subtracting the sample mean from scores.

Hypothesis 3a tested whether the different dimensions of religiosity (i.e., intrinsic, non-organized, and organized) moderated the relationship between acculturative stress

and SWL, and more specifically whether the dimension of intrinsic religiosity reduced the relationship between acculturative stress and SWL, more than the dimensions of organized and non-organized religiosity. The variables were entered with main effect variables in the first block followed by interaction terms in the second block. These regression models (initial and incremental) generated statistically non-significant results. The dimensions of religiosity and acculturative stress in the first block were non-significant ( $R = .20$ ,  $R^2 = .04$ , adjusted  $R^2 = .01$ ,  $F[4,119] = 1.29$ ,  $p = .28$ ) and the interactions in the second block demonstrated non-significant effects ( $R = .25$ ,  $R^2 = .06$ , adjusted  $R^2 = .01$ ,  $F[3,116] = 1.11$ ,  $p = .45$ ). Therefore, hypothesis 3a was not supported. Table 4 provides statistics of the initial and incremental regression model for hypothesis 3a.

**Table 5. Moderation effects of intrinsic religiosity, organized religiosity, and non-organized religiosity in the relationship between acculturative stress and SWL**

	$\Delta R^2$	$B$	$SE B$	$\beta$	$sr^2$	$t$	$p$
Step 1	.04						.28
RASI		-1.09	.65	-.16	.02	-1.67	.10
IR		-.11	.85	-.02	.00	-.12	.90
OR		1.24	.81	.18	.02	-1.54	.13
NOR		.10	.76	.01	.00	.13	.90
Step 2	.02						.45
RASI		-1.21	.66	-.17	.03	-1.83	.07
IR		-.30	.86	-.04	.01	-.35	.73
OR		1.33	.81	.19	.02	1.638	.10
NOR		.22	.77	.03	.00	.28	.78
RASI×IR		.57	.87	.08	.00	.66	.51
RASI×OR		-1.22	.81	-.17	.02	-1.51	.13
RASI×NOR		-.47	.70	-.07	.00	-.67	.50

Note:  $N = 124$ ; Full model  $R^2 = .063$ .

RASI=The Riverside Acculturation Stress Inventory; IR=Intrinsic Religiosity, OR=Organized Religiosity; NOR=Non-Organized Religiosity,

**Hypothesis 3b.** To test hypothesis 3b, a hierarchical regression analysis was used to determine whether religiosity would buffer the relationship between acculturative stress and depression, such that the effects of acculturative stress on depression would be reduced. Similar steps were taken (centering etc.) and the main effects were entered in the first block (i.e., three dimensions of religiosity) followed by the interaction terms in the second block. The dependent variable was changed from SWL to depression.

The results for hypothesis 3b were similar to that of 3a as the combined main effects of religiosity (i.e., intrinsic, organized, non-organized) and acculturative stress were not significantly related to depression ( $R=.20$ ,  $R^2=.04$ , adjusted  $R^2 = .01$ ,  $F[4,119] = 1.40$ ,  $p=.28$ , nor were interaction effects ( $R=.21$ ,  $R^2=.05$  adjusted  $R^2 = -.01$ ,  $F[3,116] = .26$ ,  $p=.91$ ). However, the initial model without interactions had a single significant main effect, as acculturative stress was positively associated with depression. ( $b=1.05$   $t(119) = 2.01$ ,  $p=.05$ ). Table 5 provides statistics of the initial and incremental regression model for hypothesis 3b.

**Table 6. Moderation effects of intrinsic religiosity, organized religiosity, and non-organized religiosity in the relationship between acculturative stress and depression**

	$\Delta R^2$	$B$	$SE B$	$\beta$	$sr^2$	$t$	$p$
Step 1	.04						.28
RASI		1.05	.52	.19	.03	2.01	.05
IR		-.64	.68	-.11	.01	-.94	.35
OR		-.18	.64	-.03	.00	-.28	.78
NOR		.11	.61	.02	.00	.18	.86
Step 2	.00						.91
RASI		1.04	.53	.19	.03	1.96	.05
IR		-.61	.70	-.11	.01	-.87	.38
OR		-.16	.65	-.03	.00	-.24	.81
NOR		.14	.62	.02	.00	.22	.83
RASI×IR		.46	.70	.08	.00	.65	.52

RASI×OR	-.06	.65	-.01	.00	-.09	.93
RASI×NOR	-.14	.56	-.03	.00	-.25	.80

Note:  $N=124$ ; Full model  $R^2=.045$ .

RASI=The Riverside Acculturation Stress Inventory; IR=Intrinsic Religiosity, OR=Organized Religiosity; NOR= Non-Organized Religiosity,

When viewed as a whole, the models seemed to indicate that SWL (within this sample) was not predicted by acculturative stress and that the effects of acculturative stress on depression was not buffered by religiosity. Therefore, the findings do not support hypothesis 3.

#### Hypothesis 4

**Hypothesis 4a.** Hypothesis 4a stated that persons with “high” social support would buffer the relationship between acculturative stress and SWL, and when entered as a moderator would potentially reduce negative effects of acculturative stress on SWL. To contrast, persons with “low” social support may not be as protected from the effects of acculturative stress and may as a result have less SWL.

Using a hierarchical regression model, the direct and interactive relationships between acculturative stress, SWL and “high” (versus “low”) social support were examined. The regression model without a moderator was statistically significant ( $R=.40$ ,  $R^2=.16$ , adjusted  $R^2=.15$ ,  $F [2, 121] = 11.42$ ,  $p<.001$ ), and explained 16% of the variance. The incremental model including moderators was not significant ( $R=.42$ ,  $R^2=.17$ , adjusted  $R^2=.15$ ,  $F [1, 120] = 2.15$ ,  $p=.15$ ). Even though the model was statistically significant, there was no evidence of a main effect of acculturative stress or interaction action effect of Acculturative Stress × Social Support. Because the interaction term was not statistically significant, this model is not interpreted. There was however a significant main effect of social support, ( $b = 5.39$ ,  $t [120] = 4.58$ ,  $p<.001$ ,  $sr^2=0.14$ ) on SWL, indicating that the difference in SWL between persons with high and low social

support will be 5.39 units. Despite this significant finding, the overall hypothesis of 4a was not supported. Table 6 provides statistics of the initial and incremental regression model for hypothesis 4a.

**Table 7. Moderation effects of social support in the relationship between acculturative stress and SWL**

	$\Delta R^2$	<i>B</i>	<i>SE B</i>	$\beta$	<i>sr</i> <sup>2</sup>	<i>t</i>	<i>p</i>
Step 1	.16						.001
RASI		-.67	.59	-.05	.00	-.62	.54
MSPSS		5.41	1.18	.39	.15	4.58	.001
Step 2	.02						.15
RASI		.44	.81	.06	.00	.54	.59
MSPSS		5.39	1.18	.39	.14	4.58	.001
RASI×MSPSS		-1.73	1.18	-.17	.02	-1.47	.15

Note: *N*=124. Full model  $R^2$  = .045.

MSPSS=Multidimensional Scale of Perceived Social Support; RASI=The Riverside Acculturation Stress Inventory

**Hypothesis 4b.** Hypothesis 4b stated that social support would buffer the relationship between acculturative stress and depression. Based on the findings of 4a, hypothesis 4b assessed the maintained direct effect of social support as well as whether any interaction effect of Acculturative Stress × Social Support, lessened the relationship. The first block of the regression model for hypothesis 4b (without moderator) was statistically significant ( $R = .33$ ,  $R^2 = .11$ , adjusted  $R^2 = .09$ ,  $F [2, 121] = 7.24$ ,  $p < .001$ ) and explained 11% of the variance. The incremental model with the interaction term was not significant (no change in  $R^2$ ) and was not interpreted further ( $R = .33$ ,  $R^2 = .11$ , adjusted  $R^2 = .085$ ,  $F [1, 120] = .016$ ,  $p = .90$ ). There was no evidence of a main effect of acculturative stress nor an interaction effect of Acculturative Stress × Social Support. A significant main effect of social support on depression was observed ( $b = -3.22$ ,  $t [120] = -3.30$ ,  $p = .002$ ,  $sr^2 = .08$ ) indicating that the difference in depression between individuals with high and low social support was  $-3.22$ . Overall, however, hypothesis 4 was not

supported. Table 7 provides statistics of the initial and incremental regression model for hypothesis 4b.

**Table 8. Moderation effects of social support in the relationship between acculturative stress and depression**

	$\Delta R^2$	<i>B</i>	<i>SE B</i>	$\beta$	<i>sr</i> <sup>2</sup>	<i>t</i>	<i>p</i>
Step 1	.11						.00
RASI		.65	.49	.12	.01	1.33	.19
MSPSS		-3.20	.97	-.29	.08	-3.31	.00
Step 2	.00						.90
RASI		.59	.67	.11	.00	.88	.39
MSPSS		-3.22	.98	-.29	.08	-3.30	.00
RASI×MSPSS		.12	.98	.02	.00	-1.47	.90

Note: *N* = 124.

MSPSS=Multidimensional Scale of Perceived Social Support; RASI=The Riverside Acculturation Stress Inventory

### Hypothesis 5

**Hypothesis 5a.** In an effort to determine the combined effect of social support and religiosity, the variables were entered as moderators in 2 regression models of analysis. The first model (5a) examined the support provided by social support and religiosity between acculturative stress and SWL, where it was hypothesized that the negative effects of acculturative stress would be weakened when it came in contact with the moderators. The second model (5b) hypothesized that a buffering effect (of religiosity and social support) would occur between acculturative stress and depression, which would weaken the relationship.

Hypothesis 5a utilized a multiple regression analysis, and entered the centered predictor variables (i.e., acculturative stress, social support, intrinsic religiosity, organized religiosity, and non-organized religiosity) in the first block, followed by the interactions/moderators in block/step 2. The regression model without moderators was statistically significant ( $R=.42$ ,  $R^2=.17$ , adjusted  $R^2=.14$ ,  $F [5, 118] = 4.94$   $p<.001$ ), and

explained 17% of the variance. The incremental model with moderators was not statistically significant ( $R=.45$ ,  $R^2=.21$ , adjusted  $R^2=.14$ ,  $F [4,114] = 1.165$ ,  $p = .33$ ). Social support was the only independent variable that maintained significance ( $t [118] = 4.34$ ,  $p < .001$ ), further solidifying the predictive value of social support that was identified in hypothesis 4. The dichotomized variable of social support emerged as a better predictor of SWL, such that difference in SWL between those with high and low social support was 5.20 ( $b = 5.20$ ,  $t [114] = 4.34$ ,  $p = .001$ ,  $sr^2 = .13$ ). Table 8 provides statistics of the initial and incremental regression model for hypothesis 5a.

**Table 9. Moderation effects of social support and religiosity in the relationship between acculturative stress and SWL**

	$\Delta R^2$	$B$	$SE B$	$\beta$	$sr^2$	$t$	$p$
Step 1	.17						.000
MSPSS		5.20	1.20	.37	.13	4.34	.00
IR		-.33	.79	-.05	.001	-.42	.68
OR		.93	.76	.13	.01	1.23	.22
NOR		.22	.71	.03	.0007	.31	.75
RASI		-.57	.62	-.08	.006	-.91	.36
Step 2	.03						.33
MSPSS		5.19	1.21	.37	.13	4.31	.00
IR		-.51	.80	-.07	.003	-.63	.53
OR		1.0	.76	.14	.01	1.32	.19
NOR		.30	.71	.04	.001	.43	.67
RASI		.13	.86	.02	.0002	.15	.88
MSPSS*RASI		-1.66	1.23	-.16	.0013	-1.34	.18
IR×RASI		.26	.81	.04	.0007	.33	.75
OR×RASI		-.86	.77	-.12	.009	-1.12	.27
NOR×RASI		-.64	.66	-.09	.0007	-.98	.33

Full model  $R^2 N=124$

MSPSS=Multidimensional Scale of Perceived Social Support; RASI=The Riverside Acculturation Stress Inventory IR=Intrinsic Religiosity; OR=Organized Religiosity; NOR=Non-Organized Religiosity

**Hypothesis 5b.** Hypothesis 5b sought to determine whether the combined effort of social support and religiosity, along with interaction of Acculturative Stress with each of the three Religiosity dimensions (Acculturative Stress × Intrinsic Religiosity,

Acculturative Stress × Organized Religiosity, Acculturative Stress × Non-organized Religiosity) or Acculturative Stress × Social Support, would provide a greater buffering effect in the relationship between acculturative stress and depression. After recognizing the uniqueness of social support in predicting SWL, a similar outcome was expected when the dependent variable was changed to depression. Instead of entering all of the predictor variables at once, variables were entered stepwise to exclude all non-significant variables.

Similar to the previous hypothesis, the stepwise method regression model revealed significant results ( $R=.31$ ,  $R^2=.09$ , adjusted  $R^2=.09$ ,  $F [1, 122] = 12.62$ ,  $p<.001$ ) and explained 9% of the variance. There were no main effects of acculturative stress and/or the three religious dimensions, and none of the interaction terms were statistically significant. Social support maintained statistical significance ( $b = -3.43$ ,  $t [122] = -3.55$ ,  $p<.001$ ,  $sr^2 = .09$ ), and suggested that the difference in depression between participants with high and low social support was  $-3.55$ . While this finding provides some evidence for the protective abilities of social support against depressive outcomes, hypothesis 5 was not supported. Table 9 provides statistics of the initial and incremental regression model for hypothesis 5b.

**Table 10. Moderation effects of social support and religiosity in the relationship between acculturative stress and depression**

	$\Delta R^2$	$B$	$SE B$	$\beta$	$sr^2$	$t$	$p$
Step 1	.10						.001
Variable							
MSPSS		-3.43	.96	-.31	.09	-3.55	.001

MSPSS=Multidimensional Scale of Perceived Social Support; RASI=The Riverside Acculturation Stress Inventory IR=Intrinsic Religiosity; OR=Organized Religiosity; NOR=Non-Organized Religiosity

## Hypothesis 6

**Hypothesis 6a.** Hypothesis 6a sought to determine whether social support and the three dimensions of religiosity buffered the relationship between acculturative stress and SWL while holding acculturation and demographic variables constant (i.e., current age, gender, level of education, income, age of migration, and religious activities). Findings from Hypothesis 5, suggested non-significant interaction terms; however, this analysis observed whether there would be a continued main effect of social support, along with any other emergent effects from demographic variables.

To test hypothesis 6a, a stepwise regression was conducted, where control variables were entered in the first step, followed by predictors and lastly the interactions. The initial model identified a main effect of income by a statistically significant regression model ( $R=.34$ ,  $R^2=.12$ , adjusted  $R^2=.11$ ,  $F [1, 121] = 15.79$ ,  $p<.001$ ), and explained 12% of the variance. It was found that income significantly predicted SWL ( $b = 1.87$ ,  $t [121] = -3.97$ ,  $p<.001$ ,  $sr^2 = .12$ ), so that for every unit change in income, SLW increased by 1.87 units.

Notably, an incremental model identified 2 main effects having removed non-significant variables including moderations/interactions. There was an observed change in  $R^2$  of .10 thereby explaining an additional 10% of the variance. The model fit maintained significance ( $R=.47$ ,  $R^2=.22$ , adjusted  $R^2=.21$ ,  $F [1, 122] = 16.82$ ,  $p <.001$ ) and within this model social support ( $b = 4.74$ ,  $t [120] = 4.102$ ,  $p<.001$ ,  $sr^2 = .11$ ) and income ( $b = 1.48$ ,  $t [120] = -3.26$ ,  $p <.001$ ,  $sr^2 = .07$ ) significantly predicted SWL such that the difference between high and low social support was 4.74, and for every change

in income SWL increased by 1.48 units. Table 10 provides statistics of statistics reported in the stepwise regression model for hypothesis 5a.

**Table 11: Demographic controls and moderation effects of social support and religiosity in the relationship between acculturative stress and SWL**

Variable	$\Delta R^2$	<i>B</i>	<i>SE B</i>	$\beta$	<i>sr</i> <sup>2</sup>	<i>t</i>	<i>p</i>
Step 1	.12						
Income		1.87	.47	.34	.12	3.97	.00
Step 2	.11						
Income		1.48	.45	.27	.07	3.26	.00
MSPSS		4.74	1.16	.34	.11	4.10	.00

Full model  $R^2=.22$ ;  $N=124$

MSPSS=Multidimensional Scale of Perceived Social Support

**Hypothesis 6b.** Hypothesis 6b examined whether social support and the three dimensions of religiosity buffered the relationship between acculturative stress and depression while holding acculturation and demographic variables constant (i.e., current age, gender, level of education, income, age of migration, and religious activities). Stepwise regression was used to enter the variables, and control variables were entered in the first step followed by predictors, and lastly the interactions. At this point in the analysis all interactions were non-significant, so significance was not an anticipated outcome for interaction terms. However, the analysis was seeking to address whether control variables related to depression as an outcome. The model was statistically significant ( $R=.31$ ,  $R^2=.10$ , adjusted  $R^2=.09$ ,  $F [1, 121] = 12.69$ ,  $p < .001$ ), and explained 10% of the variance. A significant main effect of social support was observed ( $b = -3.46$ ,  $t [121] = -3.56$ ,  $p < .001$ ,  $sr^2 = .09$ ), demonstrating that the difference between high and low social support was  $-3.35$ , and was maintained by every decreased unit of depression. Table 11 provides statistics reported in the stepwise regression model for hypothesis 6b.

**Table 12: Demographic controls and moderation effects of social support and religiosity in the relationship between acculturative stress and depression**

Variable	$\Delta R^2$	<i>B</i>	<i>SE B</i>	$\beta$	<i>sr</i> <sup>2</sup>	<i>t</i>	<i>p</i>
Step 1	.10						

MSPSS	-3.46	.97	-.31	.09	-3.56	.00
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Full model  $R^2=10$ ;  $N=124$   
MSPSS=Multidimensional Scale of Perceived Social Support

## CHAPTER 5

### Discussion

The results obtained in this study did not support the proposed hypotheses. However, given the unique nature of the study's sample, the results still provide some helpful information for the post migration behaviors and wellness of Black Caribbeans within the context of ecological systems. Based solely on the outcomes of the regression analysis it was determined that acculturative stress experienced by Black Caribbean immigrants was not related to SWL nor depression in the surveyed sample. The regression and moderation analyses resulted in non-significant main effects of religiosity as well as non-significant interaction effects of religiosity (across all three dimensions) and social support with acculturative stress. In other words, the expected buffering effects of social support and religiosity were not found.

Despite the lack of significant findings, certain theoretical concepts should be taken into consideration when interpreting these results. Specifically, tenets of Bronfenbrenner's ecological systems (micro, meso, exo, macro, and chronosystems: Bronfenbrenner, 1979) can help provide context for how migration experiences may impact findings. The findings for the six hypotheses will be discussed through the assumed system and interaction between systems, in order to provide possible context for participant responses. In addition, qualitative responses that were not part of the quantitative analysis will be highlighted as additional rationale for the findings. Although this study was exploratory and descriptive, the qualitative responses may help capture some participant experiences that were not represented in numbers.

## Hypotheses 1 and 2

The first two hypotheses proposed relationships between acculturative stress and the two outcome variables of SWL and depression using Pearson correlations. Based on research that outlines the negative effects of the migration process on immigrants' mental health (Bécares et al., 2012), hypothesis 1 proposed a positive and significant relationship between acculturative stress and depression. In this sample, the total measure demonstrated a positive relationship to depression although the relationship was not statistically significant.

Although the acculturative stress measure was used as a unidimensional construct and *not* used as subconstructs, it is important to note that research supports the use of the measure in both ways. Additionally, in this study the Cronbach's alpha for the entire scale was higher than the subscales Cronbach's alphas, thereby indicating that reliability of the measure improved when within this sample when used as a unidimensional measure of acculturative stress. Participants shared qualitative responses that seemed to capture one (or more) of the dimensions (and overall experience of acculturative stress), which included feelings of discrimination experiences and some challenging relations because of their culture. Some of the experiences included the following: "As a young girl assimilation was difficult. My name, dress and entire way of being was always scrutinized and many times ridiculed." Another participant viewed their experience as "Eye-opening and culturally different. The biggest adjustments were recognizing that people simply do not accept you because of background/origin/race - not because of anything you did or said. Quite different from growing up in an environment where everyone genuinely cared about your wellbeing and everyone lived as neighbors." These

qualitative statements seemed to be indicative of past acculturative stress, mainly in domains of intercultural relations and/or feelings of discrimination; many of these sentiments though qualitatively present did not result in statistically significant findings.

Theoretically, migrants who already have a pre-established microsystem (e.g., family, peers, church) available to them in the United States may experience the acculturative transition much easier than migrants who have to search for and build a new community. Additionally, the majority of participants in the current sample had migrated before the age of 30 and had lived in the United States for over 15 years. Participants may have experienced the stressors of acculturation, but the systems that they belonged to may have provided protection from both the effects of acculturative stress and depression. For example, participants may have benefited from being connected to resources and groups like family residing in the United States, churches and religious institutions, Caribbean infused neighborhoods like Flatbush Ave. in Brooklyn, New York (microsystem), interconnections between work and home (mesosystem), developed socioeconomic status (macrosystem) and time to adjust and develop appreciation for their new environment (chronosystem) may have weakened the presence of the relationship. One participant reported that since migrating it has been observed that “people react positively towards Caribbean nationals and show interest in the culture”. Participants also echoed a sentiment of finding connectedness and shared experiences via an “ability to remain true to your culture base with other immigrants, Caribbean foods available, and the bond and closeness other immigrants.”

As with hypothesis 1, the relationship between acculturative stress and SWL was in the anticipated negative direction but was not statistically significant. In some ways,

this makes sense as discrimination and intercultural relations (possibly negative ones) during the extended acculturation process may diminish wellness. The qualitative responses seem to show that overall people were satisfied with their lives, with many sharing that they have had many positive opportunities while in the United States. One participant stated: “I’ve had amazing opportunities for my career” with another sharing that his achievement of “owning a home” was a positive part of his immigrant experience.

The qualitative responses indicated that the systems and the interconnectedness provided substantive enhancement of wellbeing and SWL, and protected participants from typical stressors of acculturation. An assumption could be because of the places/states in which people chose to eventually settle. As noted in demographic analysis, most participants were in Florida, New York and Texas. Except for Texas (which also has a strong Black Caribbean population), most Caribbean persons tend to migrate to the East Coast because of the ease and accessibility of the Caribbean islands, thereby creating a saturation of availability of pre-established communities in these states. Importantly, the chronosystem may have significantly affected this outcome as many of the participants (judging from the age of migration) may have migrated for academic reasons. Over time, participants may have experienced an increase in income as noted by the income brackets in the demographics. They may have also gained a better understanding of American norms and widened their support system across multiple settings (exosystem). Another possible rationale could have been participants’ ability to preserve the carefree, island lifestyle the Caribbean is known for, and used the mindset to maintain some semblance of satisfaction, despite being displaced. This assumption was

evidenced by qualitative responses that inferred how immigrants were intentional in maintaining communities that could replicate their past Caribbean life including carnivals and festivals (e.g. West Indian Labor Day Parade).

### **Hypotheses 3 and 4**

The next two hypotheses looked at three dimensions of religiosity (i.e., intrinsic, organized, non-organized) and social support as separate moderators of acculturative stress on the outcomes of SWL and depression. Hypothesis 3a anticipated a moderation effect of religiosity on acculturative stress and SWL, 3b a buffering effect of religiosity on acculturative stress on depression. None of the findings were statistically significant, with nonsignificant main effects of religiosity and nonsignificant interaction effects.

Hypothesis 4a also predicted a moderation effect of social support on acculturative stress and SWL, and 4b a buffering effect on acculturative stress and depression. All subsequent hypotheses with social support used the variable as a dichotomized measure of social support, namely high and low. In both regression models, social support demonstrated a statistically significant main effect, but non-significant interactions with acculturative stress; religiosity did not demonstrate any additional protection. Essentially, the models did not establish the buffering or moderation expectations stated in the hypotheses. However, a significant main effect of social support indicated that the presence of a support system of family, friends or significant other provides some degree of protection.

In the qualitative responses, one participant reflected on her connectedness to support and the importance of relationships in her life as an immigrant. She described what was difficult and her way of attending to the difficulty through finding community.

She reported “relationships (were difficult). I have found it easier to be with another immigrant from another country other than the United States. Each can appreciate the other person's culture, heritage and respect”. Another participant highlighted relationships as positive noting that what was most meaningful was: “The friendships I have made along the way in my profession has been valuable and very meaningful to me.”

Although religiosity and church attendance has been an important element in most Caribbeans’ upbringing, the lack of significance was quite surprising, given that the majority of the sample either attended religious services or engaged in some form of religious activity. One participant responded that the most positive part of her immigration experience was that it “Taught me to have faith in God.” From a systems perspective, it may be that institutions and groups within the same system may function differently and one institution/group may be more effective than the other in providing adequate support towards development and wellbeing. The microsystem contains both people (or groups of people) providing social support (e.g., family, friends, significant others) and religious institutions. However, the mesosystem interaction (or lack thereof) may weaken the relationships within the microsystem as everyone in the microsystem may share different views about religion and its significance to wellness. For the individual, interpretations of religious doctrines may shift (either more conservative or liberal), making the shift a function of time and the mesosystem. Combined exposure to Western culture and its ideologies and gained insight may have lessened the efficacy of religiosity, even though individuals still identify as religious. The importance of social support became clear not only from a systems perspective, but from a cultural perspective as well. Similar to the African American/Black community residents of the United States,

Black Caribbeans are seen as collectivists and typically rely on the support of the community for maintenance of wellness (Yoon et al., 2012).

### **Hypotheses 5 and 6**

The last two hypotheses examined the combined moderating effects of religiosity and social support on SWL (5a) and depression (5b) and holding acculturation and demographic variables constant assessed the main effects and moderation effects of religiosity and social support on SWL (6a) and depression (6b). The outcome of the first model to test hypothesis 5a was a statistically significant main effect of social support with neither religiosity nor social support moderators retainable for interaction analysis. At this point, social support consistently predicted both SWL and depression in past models, and it was predicted that its impact would continue. Therefore, for 5b instead of using the “enter” method in the regression steps, stepwise entry was used to eliminate the variables that were not adding any value to the model. The result of 5b was that social support continued to perform as anticipated and maintained statistical significance as a main effect. All interactions/moderations continued to be statistically non-significant and were therefore not retained in the model. The hypothesis was not supported; however, the stability of social support as a protective factor, even when placed in the same model as the three religiosity dimensions as both a main effect and a moderator seemed unwavering.

In looking at the ecological influences post migration, social support seemed to be well developed across systems, and potentially had moved through multiple systems from the microsystem, to the mesosystem and exosystem, thereby providing some protection against acculturative stress and supporting satisfaction and wellness. Two participants

stated the positive part of their experiences was meeting their spouses, while another stated that they found “very useful and helpful people here who helped in solving many problems and was present as a guideline giver all the time.” Even though the subconstructs of social support were not used in the analysis (e.g., friends, family, significant other), the qualitative responses

Social support may also be experienced differently: While building community in the United States it remains important that connection is maintained with the family and friends that were left on the island. Even though research has found that Black Caribbeans tend to have less (physical) contact with extended family than Black/African Americans and White individuals (Taylor et al., 2013), one reason for the finding could be that extended family of Black Caribbeans do not live in the immediate geographical area (within the United States). However, with the introduction of better and affordable internet messaging connections across the globe via free texting applications (e.g., WhatsApp, Viber, and ooVoo), it is possible that Black Caribbeans have increased their level of communication with extended family, particularly those who reside outside of the United States thereby broadening the scope of social support.

Hypothesis 6 controlled for factors like gender and other demographic variables (i.e., current age, level of education, income, age of migration, and religious activities) and acculturation in assessing whether main effects and/or interaction effects of religiosity and social support would either support the relationship between acculturative stress and SWL (6a) or buffer the relationship (6b) towards reduction of negative symptom outcomes. Stepwise entry was also used for this analysis, such that the non-significant predictors were excluded from the model. In addition to social support,

income emerged with statistically significant main effects (6a) in predicting SWL. When the variables were used as controls and the predictors of depression were entered (6b) via stepwise analysis, only social support continued to have a statistically significant main effect.

The significance of income is noteworthy in this sample, as many of the participants made more than the average American and Black/African American persons, an achievement that may have occurred through opportunities of advancement as reported in the qualitative responses (e.g. education, job opportunities). It may also speak to the “model minority” status that Black Caribbeans are often promoted to when people learn of their immigration status (Gordon, 2007; Joseph et al., 2013; Shaw-Taylor, 2007; Thornton et al., 2013). Hardworking attitudes instilled in the homes of Black Caribbeans often propels them to succeed regardless of the environment, but especially so in the United States when there are an abundance of opportunities. One participant shared that they “grew up one of 5 to a single mother” and that they “could never be as successful as I am without being in the US.”

For hypothesis 6, social support maintained its significance, which underscores the importance of systemic cohesion and togetherness in the Black Caribbean community. The bi-directional influences of ecological systems help us understand that systems flow out and in, and when support is sought, it is also received, a concept that may not be fully understood to new immigrants who often do not have to seek support in their past Caribbean communities, as support is simply an inherent quality. Overall, the study did not find full evidence to support the proposed hypotheses. Yet, it became

apparent that counseling professionals need to learn more about the importance of social support in the Black Caribbean community.

### **Limitations**

Even though the hypotheses of this study were not supported, the importance of research within this population is not diminished. Black Caribbeans continue to migrate to the United States in record numbers, whether to reside permanently or attend higher education institutions. While social support played a significant role for this Black Caribbean sample, some Black Caribbean immigrants may not have a pre-established community upon arrival and may experience distress, especially those who have migrated for academic pursuits.

The primary limitations of this study revolved around potential issues with measures, statistical power and sample size. Given the study was intended to be exploratory via a quantitative descriptive analysis, the limitations attributed to this type of study (i.e. limited outcomes, non-generalizability, not able to explore the full experience, knowing the what and not the why or how) were inherent. In addition, data on some measures were not normally distributed. Attempts were made to bring variables as close to normal distribution as possible, as normal distribution is an assumption that is necessary for the type of analysis used (regression). Social support was dichotomized, allowing for significant control of variance owing to the measure ceiling effect. While the distribution of the outcome variable of depression could not be improved by transformations, the predictors were adjusted as much as possible. A concern with the depression measure was the internal consistency only nearing favorable. This may be a function of the measure itself or sample responses.

Another limitation was the questions within the measures themselves. Questions assessed for current distress and asked respondents to think more about the “here and now” rather than “then and there”. It is possible that when asked to reflect on their past experiences of the immigration process, participants expressed more impact of distress in their qualitative responses than in the quantitative findings. In keeping with the theoretical interpretation over time, participants were probably able to find community and social support, thereby minimizing how any current distress related to their current well-being.

The inclusion of a social desirability measure may have added information regarding participant response style. Research that focused specifically on the mental health and post-migration experiences of Black Caribbeans was in limited supply, thus inferring that many persons of Caribbean heritage do not readily participate in research and/or that researchers are not focusing on Black Caribbeans (although there is an upward trend in migration statistics). This challenge was experienced during the recruitment phase, as persons may have been unwilling to participate due to the research component by itself or the Black community’s negative experiences with scientific research throughout the history of the United States. It is possible that U.S. Black Caribbeans attempted to paint themselves in a positive light, as admitting to distress (even in private research) may have diminished their self-concept of wellness. Therefore, a social desirability measure may have helped controlled for this. Given the current political climate with heightened and more overt racism and discrimination, a new migrant may have expressed more feelings of distress and concern than someone who has

been here for over 20 years, who has learned to manage their distress in healthier ways; most of the sample had been residing in the U.S. for over 10 years.

The religiosity measure was three dimensional in nature and was intended to capture intrinsic, non-organized, and organized religiosity. However, when an EFA was conducted, one factor seemed to fit the data better than the proposed three-dimensional factors. This may be an indication that the measure is able to capture a single higher order construct of religiosity rather than representing a theorized multidimensional structure of religiosity. A different measure of religiosity may have been able to differentiate the dimensions more clearly for Black Caribbeans, given that over 50% of study participants confirmed church attendance or religious engagement.

Furthermore, generalizability is questionable as the sample may not represent most recently migrated Black Caribbeans, considering that the sample was highly educated and had above average incomes. Furthermore, selection bias may also be a limitation, as the sample was generated from friends and family who have had (for the most part) positive immigration experiences, as their migration was by choice. Study results also represent experiences of migrants who have lived in the United States for a significant amount of time and have possibly learned to better navigate U.S. culture.

Another factor that is worth considering is that almost 80% of the sample participants identified as women. Even though the measures like the SWLS are not often intended to be affected by gender effects (Diener et al., 1985; Lewis, Shevlin, Bunting, & Joseph, 1995; Shevlin, Brunnsden, & Miles, 1998), research across different ethnicities suggests that types of support (Martínez-Hernández, Carceller-Maicas, DiGiacomo & Ariste, 2016) and need for support (Lee, Pieczynski, DeDios-Stern, Simonetti, & Lee,

2015) tends to vary across genders, such that women often express a need for more social support.

As a result of a larger number of women in the sample, the likelihood of finding an effect of social support may have increased, even if not to statistical significance when used as moderators. Additionally, the current climate for Black men (African American) in America leans in favor of them often being more likely to be stereotyped as dangerous or criminal, thus historically this population has rightfully demonstrated an unwillingness to participate in research. Black Caribbean men may possess a similar unwillingness in the form of them possibly not wanting to disclose hardships that they experience either because of cultural norms of non-disclosure, privatizing an individual immigrant experience or negative treatment received because of the resemblance to African American men. Even though Black Caribbean immigrants are being touted as the new “model minority” (Thorton et al., 2013), Black Caribbean men experience similar disadvantages as their African American male counterparts and may even behave similarly in their hesitation towards participation in research, making for a noteworthy difference in gender participation in this study and future studies. Yet exploration of this specific gender dynamic is very important, particularly for clinical implications within a population that does not typically seek out mental health treatment.

### **Implications for Counseling**

People of color seem to be willing to use mental health services more if they are able to be assisted and supported in challenging their stigma about mental health and work through possible negative attitudes about counseling (Fripp & Carlson, 2017). This may also be true for Black Caribbean immigrants in university settings. Having recently

completed internship at the University of South Florida, I experienced firsthand the need for mental health treatment of Caribbean immigrants, and the often-delicate way their concerns need to be addressed. They experience distress associated with their immigrant status and often experience additional distress as a person of color living in the United States. Being displaced from a community that understands your accent and idioms can be distressing in the larger community, and even more distressing in an academic community where writing styles and teaching modalities differ (e.g. British versus American styles). Another personal observation is that their mental health concerns, despite the additional concerns of immigration and acculturation, did not differ from those of their White counterparts, indicating that mental health challenges affects everyone. Being able to honor and respect their heritage as well as treat their presenting mental health concern requires helping professionals to understand factors that may be outside of traditional supports (e.g., religion, family attachment, ethnic pride).

### **Future Research**

This study decided to focus on Black Caribbean immigrants from predominantly English-speaking islands. In doing so a large subset of the Black Caribbean community was omitted including persons from the French, Spanish and Dutch Caribbean islands. Inclusion of these islands may have broadened the religious, economic and academic distribution of participants. For example, Haitians who are multilingual and communicate with Haitian Creole, a derivative of French also identify as Christians and other religious affiliations including Voodoo. Some Haitian immigrants also may have had unique circumstances as their immigration process may have resulted from the earthquake of 2010. One may conclude that their immigration experience and acquisition of community

may have been especially difficult as they would have presented with a language barrier and possible trauma given the destruction of their home and community. Themes of acculturative stress and mental health outcomes of depression or diminished satisfaction with life may have been present in both the qualitative and quantitative sections of the study. Similarly, immigrants of Dutch (Saba, Suriname) Spanish (Cuba, Dominican Republic) and other French-speaking (Martinique, Guadeloupe) islands would have contributed richness and diversity of geography to the study. Future research may consider including these islands, (with preparations that may include translation of the measures) with an additional analysis that compares regions based on their primary language. This may determine whether the immigrant experience differs by region.

Another consideration for future research is examination of the post-migration support that persons receive, and the communities wherein the support resides. This study's participants were concentrated in areas that have been known to have a high concentration of preestablished Black Caribbean communities, especially on the East Coast states of Florida, New York and Texas. The benefit of moving to one of these states as a Black Caribbean immigrant is the potential maintenance of the home culture through festivals and organizations, access to familiar foods, and even finding familiar faces to make the transition towards understanding American cultural norms easier. An area of exploration would be of persons who reside in the U.S. but who do not live within a developed Caribbean community. As determined by the limited findings in this study, social support may have a latent influence on mental health outcomes and satisfaction with life. Absence of social support may provoke alternate outcomes including increased

acculturative stress and difficulty with the immigrants' acculturation process being highlighted in qualitative responses.

### **Conclusion**

Even though the proposed hypotheses of religiosity or the combination of religiosity and social support guarding against the effects of acculturative stress towards life satisfaction or good mental health, social support presented as an important factor in post-migration Black Caribbean wellness. This *is* a significant finding. The study highlights the question of the needs of Black Caribbeans and gives pause to personal (and cultural) assumptions that are made regarding the overall protective factor of religion across the Caribbean and the diaspora. By excluding other Caribbean non-English speaking and U.S. owned islands, their influence of religion and social support from these islands did not add to the possible effects. A future direction should include these islands and explore their additional effects.

## APPENDIX A

### Demographic Form

Please respond to the following items:

1. Please state your age: \_\_\_\_\_
2. Please state your gender \_\_\_\_\_
3. Please state your sexual orientation? \_\_\_\_\_
4. Highest level of education completed.
  - a. Some high school
  - b. High school diploma /CXC/GCE/CSEC
  - c. GED
  - d. Some college
  - e. Associates degree
  - f. Undergraduate degree/ Bachelor's degree
  - g. Graduate degree(s)
5. What is your income?
  - a. Less than 20,000
  - b. 20,000-40,000
  - c. 40,001-60,000
  - d. 60,001-80,000
  - e. More than 80,000
6. What is your country/island of origin (drop down box)?
  - a. The Bahamas O
  - b. Belize O
  - c. Bermuda O
  - d. Anguilla LI
  - e. Antigua and Barbuda LI
  - f. British Virgin Islands LI
  - g. Dominica WI
  - h. Montserrat LI
  - i. Saint Kitts and Nevis LI
  - j. Barbados O
  - k. Grenada WI
  - l. Saint Lucia WI
  - m. Saint Vincent and the Grenadines WI
  - n. Cayman Islands O
  - o. Guyana O
  - p. Jamaica O
  - q. Trinidad and Tobago O
  - r. Turks and Caicos Islands O
7. State currently residing: \_\_\_\_\_
8. At what age did you migrate to the United States?
9. How long have you lived in the United States (in years)?
  - a. 1-5
  - b. 6-10
  - c. 11-15

- d. 16-20
- e. 20-25
- f. Over 25 years

10. Do you attend church services, or engage in any religious service activities?

11.                      What (if any) is your religious affiliation? \_\_\_\_\_

## APPENDIX B

RASI (Riverside Acculturation Stress Inventory)  
Benet-Martinez & Haritatos (2005)

Think about how you faced American life and culture as a Black Caribbean. Below are some statements that may or may not describe your own experience. For each statement select the choice that describes you best.

Please indicate the level to which you agree with these statements	Strongly disagree	Somewhat disagree	Not sure	Somewhat agree	Strongly agree
It's hard for me to perform well at work because of my accent					
I feel discriminated against by mainstream Americans because of my Black Caribbean background					
I have had disagreements with people of my own Black Caribbeans (e.g., friends or family) for liking American ways of doing things					
I feel that there are not enough people of my own Black Caribbean group in my living environment					
Because of my Black Caribbean background, I have to work harder than most Americans					
I often feel misunderstood or limited in daily situations because of my accent					
I have been treated rudely or unfairly because of my Black Caribbean background					
I feel that my particular cultural/ethnic practices have caused conflict in my relationships					
I feel that the environment where I live is not multicultural enough; it doesn't have enough cultural richness					
I feel the pressure that what "I" do is representative of Black Caribbean group's abilities					
It bothers me that I have an accent					
I feel that people very often interpret my behavior based on their stereotypes of what people of my Black Caribbean background are like					

I have had disagreements with Americans for having or preferring the costumes of my own Black Caribbean group					
When I am in a place or room where I am the only Black Caribbean person, I often feel different or isolated					
In looking for a job, I sometimes feel that my Black Caribbean status is a limitation					

## APPENDIX C

### Center for Epidemiological Studies Depression Scale

Radloff, L.S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1: 385-401.

Below is a list of some of the ways you may have felt or behaved. Please indicate how often you've felt this way during the past week. **Respond to all items.**

Please indicate the response that is most related to you. During the past week	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	All of the time (5-7 days)
1. I was bothered by things that usually don't bother me.				
2. I did not feel like eating; my appetite was poor.				
3. I felt that I could not shake off the blues even with help from my family.				
4. I felt that I was just as good as other people.				
5. I had trouble keeping my mind on what I was doing.				
6. I felt depressed.				
7. I felt that everything I did was an effort.				
8. I felt hopeful about the future.				
9. I thought my life had been a failure.				
10. I felt fearful.				
11. My sleep was restless.				
12. I was happy.				
13. I talked less than usual.				
14. I felt lonely.				
15. People were unfriendly.				
16. I enjoyed life.				
17. I had crying spells.				
18. I felt sad.				
19. I felt that people disliked me.				
20. I could not "get going."				

APPENDIX D

Vancouver Index of Acculturation (VIA)

Ryder, A.G., Alden, L., & Paulhus, D.L. (2000).

Please pick one of the numbers to the right of each question to indicate your degree of disagreement or agreement (1-9). Many of these questions will refer to your heritage culture, meaning the original culture of your family (other than American), more specifically the country/island of your birth.

Question	1- disagree	2	3	4	5	6	7	8	9-agree
1. I often participate in my <i>heritage cultural</i> traditions									
2. I often participate in mainstream American cultural traditions.									
3. I would be willing to marry a person from my <i>heritage culture</i> .									
4. I would be willing to marry an American person									
5. I enjoy social activities with people from the same <i>heritage culture</i> as myself.									
6. I enjoy social activities with typical American people.									
7. I am comfortable interacting with people of the same <i>heritage culture</i> as myself									
8. I am comfortable interacting with typical American people.									
9. I enjoy entertainment (e.g. movies, music) from my <i>heritage culture</i> .									
10. I enjoy American entertainment (e.g. movies, music).									
11. I often behave in ways that are typical of my <i>heritage culture</i> .									
12. I often behave in ways that are typically American.									
13. It is important for me to maintain or develop the practices of my <i>heritage culture</i> .									
14. It is important for me to maintain or develop American cultural practices.									
15. I believe in the values of my <i>heritage culture</i> .									
16. I believe in mainstream American values.									
17. I enjoy the jokes and humor of my <i>heritage culture</i> .									
18. I enjoy American jokes and humor.									
19. I am interested in having friends from my <i>heritage culture</i> .									
20. I am interested in having American friends.									

## APPENDIX E

### Duke University Religion Index

#### DUREL

(1) How often do you attend church or other religious meetings? (ORA)

1 - Never; 2 - Once a year or less; 3 - A few times a year; 4 - A few times a month; 5 - Once a week;  
6 - More than once/week

(2) How often do you spend time in private religious activities, such as prayer, meditation or Bible

study? (NORA)

1 - Rarely or never; 2 - A few times a month; 3 - Once a week; 4 - Two or more times/week; 5 - Daily;  
6 - More than once a day

The following section contains 3 statements about religious belief or experience. Please mark the

extent to which each statement is true or not true for you.

(3) In my life, I experience the presence of the Divine (i.e., God) - (IR)

1 - Definitely not true; 2 - Tends not to be true; 3 - Unsure; 4 - Tends to be true; 5 - Definitely true of me

(4) My religious beliefs are what really lie behind my whole approach to life - (IR)

1 - Definitely not true; 2 - Tends not to be true; 3 - Unsure; 4 - Tends to be true; 5 - Definitely true of me

(5) I try hard to carry my religion over into all other dealings in life - (IR)

1 - Definitely not true; 2 - Tends not to be true; 3 - Unsure; 4 - Tends to be true; 5 - Definitely true of me

## APPENDIX F

### Multidimensional Scale of Perceived Social Support Zimet, Dahlem, Zimet & Farley, 1988

Zimet, G.D., Dahlem, N.W., Zimet, S.G. & Farley, G.K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52, 30-41.

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

- 1 = Very Strongly Disagree
- 2 = Strongly Disagree
- 3 = Mildly Disagree
- 4 = Neutral
- 5 = Mildly Agree
- 6 = Strongly Agree
- 7 = Very Strongly Agree

1. There is a special person who is around when I am in need. (SO)
2. There is a special person with whom I can share my joys and sorrows. (SO)
3. My family really tries to help me. (Fam)
4. I get the emotional help and support I need from my family. (Fam)
5. I have a special person who is a real source of comfort to me. (SO)
6. My friends really try to help me. (Fri)
7. I can count on my friends when things go wrong. (Fri)
8. I can talk about my problems with my family (Fam)
9. I have friends with whom I can share my joys and sorrows. (Fri)
10. There is a special person in my life who cares about my feelings. (SO)
11. My family is willing to help me make decisions. (Fam)
12. I can talk about my problems with my friends. (Fri)

## APPENDIX G

### Satisfaction with Life Scale

Diener, Emmons, Larsen & Griffin, 1985

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

\_\_\_\_\_ In most ways my life is close to my ideal.

\_\_\_\_\_ The conditions of my life are excellent.

\_\_\_\_\_ I am satisfied with my life.

\_\_\_\_\_ So far I have gotten the important things I want in life.

\_\_\_\_\_ If I could live my life over, I would change almost nothing.

- 31 - 35 Extremely satisfied
- 26 - 30 Satisfied
- 21 - 25 Slightly satisfied
- 20 Neutral
- 15 - 19 Slightly dissatisfied
- 10 - 14 Dissatisfied
- 5 - 9 Extremely dissatisfied

## APPENDIX H

### RESEARCH ANNOUNCEMENT

Dear Caribbean Participant:

My name is Shavern Browne and I am a doctoral student in the Counseling Psychology program at the University of Missouri-Kansas City, under the mentorship and guidance of Dr. Carolyn Barber. I would like to invite you to participate in a research study on Caribbean migrants' experiences in the United States. This study is important because exclusive research on this population is limited. The purpose of this study is to identify supportive mechanisms that contribute to healthy adjustment and wellbeing and will help to inform helping professionals on better ways that they can serve this population in their institutions and agencies.

**You are eligible to participate if:**

- i. You are at least 18 years old
- ii. You identify as a first generation Black Caribbean and were born on a British Caribbean island
- iii. You lived on the British Caribbean island for at least 8 years of your life
- iv. Currently residing in the United States

If you agree to participate you will be directed to an online survey consisting of short measures. The expected completion time is approximately 15-20 minutes. Additionally, if you choose to participate you will have a chance to be entered in a drawing for 1 of 10 \$20-dollar Visa gift cards.

Please click on the link below if you are interested in participating:

<https://redcap.umkc.edu/surveys/>

I would like to thank you for your time and consideration.

If you have any questions, please contact Shavern Browne @ [stbwx2@mail.umkc.edu](mailto:stbwx2@mail.umkc.edu) or Dr. Carolyn Barber [barberce@umkc.edu](mailto:barberce@umkc.edu). You should contact the Office of UMKC's Social Sciences Institutional Review Board at 816-235-5927 if you have any questions, concerns or complaints about your rights as a research subject.

Sincerely,

Shavern Browne M.A.  
Doctoral Candidate in Counseling Psychology  
Division of Counseling Psychology  
University of Missouri Kansas City

## APPENDIX I

### INFORMED CONSENT

Dear Participant:

You are invited to participate in a research study examining the post migration experiences of Black Caribbeans. You are selected as a possible participant because you identify as being 18 years or older, are a first-generation Black Caribbean, were born on a British Caribbean island and are currently residing in the United States. This study is conducted by Shavern Browne M.A. under the direction of Carolyn Barber PhD from the Counseling Psychology program at UMKC.

#### **Purpose of the study:**

The purpose of this study is to identify supportive mechanisms that contribute to healthy adjustment and wellbeing. It is my hope that your participation will help us further understand this dynamic in Black Caribbean immigrants so that we can best support this population post migration.

#### **Procedures:**

If you agree to be in the study, you will be asked a few demographic questions followed by 5 short surveys. It should take you approximately 15-20 minutes.

#### **Potential Risks and Discomforts:**

There is minimal risk to the participants of this study. A potential risk you may experience by completing this survey is minor discomfort while exploring the possible presence of a mental health concern i.e. depression. Should you experience serious discomfort or other risks, please seek a mental health provider in your surrounding area. You may also discontinue the survey at any point. Yet, I believe that the minimal discomfort would be outweighed by the gains of helping us learn about the supportive mechanisms that can be put in place to help with post migration adjustment.

#### **Potential benefits:**

The benefits of this study may include you the participant recognizing what has served as a protective factor for you during the migration and settling process. Your participation may also help in recognizing the advantages of utilizing these integrative supportive methods for helping professionals.

#### **Compensation:**

Each participant has the opportunity to be entered to randomly win one of 10 Visa gift cards, each valued at \$20.

#### **Confidentiality**

Every effort will be made to maintain your anonymity throughout the study. Please note that the data you provide will only be accessible to the principal investigator (Dr. Carolyn Barber) and myself. I ask that you do not include your name on any of the questionnaires. Information collected through your participation may be published in a professional journal or presented at a professional conference.

**Voluntary Nature of the Study:**

Participation in this study is completely voluntary and you may decide to withdraw your participation at any time. Your decision as to whether or not to participate will not be reflected on you in any way.

**Contacts and Questions**

If you have any questions about the outcome of this study, please contact me (Shavern Browne) at [stbwx2@mail.umkc.edu](mailto:stbwx2@mail.umkc.edu) or Dr. Carolyn Barber ([barberce@umkc.edu](mailto:barberce@umkc.edu); 816-235-6151). If you would like to contact someone other than the researcher

\_\_\_ I have reviewed the informed consent and am willing to proceed.

## References

- Agyemang, C., Bhopal, R., & Bruijnzeels, M. (2005). Negro, Black, Black African, African Caribbean, African American or what? Labelling African origin populations in the health arena in the 21st century. *Journal of Epidemiology and Community Health, 59*(12), 1014-1018. doi:10.1136/jech.2005.035964.
- Allen, E. A., & Khan, A. H. (2014). Christian spirituality, religion, and healing in the Caribbean. In P. Sutherland, R. Moodley, B. Chevannes, P. Sutherland, R. Moodley, B. Chevannes (Eds.). *Caribbean healing traditions: Implications for health and mental health* (pp. 153-163). New York, NY, US: Routledge/Taylor & Francis Group.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*. (5th ed.). Arlington, VA: Author.
- Arrindell, W. A., Meeuwesen, L., & Huyse, F. J. (1991). The Satisfaction With Life Scale (SWLS): Psychometric properties in a non-psychiatric medical outpatients sample. *Personality and Individual Differences, 12*(2), 117–123.
- Axinn, W. G., Ghimire, D. J., Williams, N. E., & Scott, K. M. (2015). Associations between the social organization of communities and psychiatric disorders in rural Asia. *Social Psychiatry and Psychiatric Epidemiology: The International Journal for Research in Social and Genetic Epidemiology and Mental Health Services, 50*(10), 1537–1545.
- Bagherian-Sararoudi, R., Hajian, A., Ehsan, H., Sarafraz, M., & Zimet, G. D. (2013). Psychometric properties of the Persian version of the Multidimensional Scale of

- Perceived Social Support in Iran. *International Journal of Preventive Medicine*, 4(11), 1277-1281.
- Baker, A. M., Soto, J. A., Perez, C. R., & Lee, E. A. (2012). Acculturative status and psychological well-being in an Asian American sample. *Asian American Journal of Psychology*, 3(4), 275–285.
- Bécares, L., Nazroo, J., Jackson, J., & Heuvelman, H. (2012). Ethnic density effects on health and experienced racism among Caribbean people in the US and England: A cross-national comparison. *Social Science & Medicine*, 75(12), 2107–2115.
- Benet-Martínez, V., & Haritatos, J. (2005). Bicultural Identity Integration (BII): Components and Psychosocial Antecedents. *Journal of Personality*, 73(4), 1015–1050.
- Bennett, P. R., & Lutz, A. (2009). How African American is the net Black advantage? Differences in college attendance among immigrant Blacks, native Blacks, and Whites. *Sociology of Education*, 82, 70 –100. doi:10.1177/003804070908200104
- Benson, J.E. (2006). Exploring the racial identities of Black immigrants in the United States. *Sociological Forum*, 21(2), 219-247.
- Bergan, A., & McConatha, J. T. (2000). Religiosity and life satisfaction. *Activities, Adaptation & Aging*, 24(3), 23–34.
- Berkel, L. A., Armstrong, T. D., & Cokley, K. O. (2004). Similarities and differences between religiosity and spirituality in African American college students: A preliminary investigation. *Counseling and Values*, 49(1), 2–26.
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative Studies of Acculturative Stress. *International Migration Review*, 21(3), 491–511.

- Bhugra, D. (2003). Migration and depression. *Acta Psychiatrica Scandinavica. Supplementum, 108*, 67.
- Briffa, D., Davidson, F., & Ferndale, D. (2016). An identification of the social and emotional needs of people living with post-lingual hearing loss. *Journal of the American Deafness and Rehabilitation Association, 50*(2), 65–87.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Brooks, L. J. (2013). The Black survivors: Courage, strength, creativity and resilience in the cultural traditions of Black Caribbean immigrants. In J. D. Sinnott, J. D. Sinnott (Eds.), *Positive psychology: Advances in understanding adult motivation* (pp. 121-134). New York, NY, US: Springer Science + Business Media. doi:10.1007/978-1-4614-7282-7\_8.
- Brown, J. L., McDonald, R., & Mitchell, R. (2015). Are people who participate in cultural activities more satisfied with life? *Social Indicators Research, 122*(1), 135-146. doi:10.1007/s11205-014-0678-7.
- Brown, R. K., Taylor, R. J., & Chatters, L. M. (2015). Race/ethnic and social-demographic correlates of religious non-involvement in America: Findings from three national surveys. *Journal of Black Studies, 46*(4), 335-362. doi:10.1177/0021934715573168.
- Burke, L. A., Neimeyer, R. A., & McDevitt-Murphy, M. E. (2010). African American homicide bereavement: Aspects of social support that predict complicated grief, PTSD, and depression. *Omega: Journal of Death and Dying, 61*(1), 1–24.

- Canty-Mitchell, J. & Zimet, G.D. (2000). Psychometric properties of the Multidimensional Scale of Perceived Social Support in urban adolescents. *American Journal of Community Psychology, 28*, 391-400. doi:10.1023/A:1005109522457.
- Centers for Disease Control and Prevention (CDC): suicide rates among persons ages 65 years and older, by race/ethnicity and sex, United States, 2002-2006: national suicide statistics at a glance. <http://www.cdc.gov/violenceprevention/suicide/statistics/rates05.html>.
- Cerny, C.A., & Kaiser, H.F. (1977). A study of a measure of sampling adequacy for factor-analytic correlation matrices. *Multivariate Behavioral Research, 12*(1), 43-47.
- Chae, S.-M., Park, J. W., & Kang, H. S. (2014). Relationships of acculturative stress, depression, and social support to health-related quality of life in Vietnamese immigrant women in South Korea. *Journal of Transcultural Nursing, 25*(2), 137-144.
- Chatters, L. M., Taylor, R. J., Bullard, K. M., & Jackson, J. S. (2009). Race and ethnic differences in religious involvement: African Americans, Caribbean Blacks and non-Hispanic Whites. *Ethnic and Racial Studies, 32*(7), 1143-1163. doi:10.1080/01419870802334531.
- Chatters, L. M., Taylor, R., Jackson, J. S., & Lincoln, K. D. (2008). Religious coping among African Americans, Caribbean Blacks and non-Hispanic Whites. *Journal of Community Psychology, 36*(3), 371-386. doi:10.1002/jcop.20202

- Clark, T. T., Salas-Wright, C. P., Vaughn, M. G., & Whitfield, K. E. (2015). Everyday discrimination and mood and substance use disorders: A latent profile analysis with African Americans and Caribbean Blacks. *Addictive Behaviors, 40*, 119-125. doi:10.1016/j.addbeh.2014.08.006.
- Constantine, M. G., Okazaki, S., & Utsey, S. O. (2004). Self-concealment, social self-efficacy, acculturative stress, and depression in African, Asian, and Latin American International College Students. *American Journal of Orthopsychiatry, 74*(3), 230–241.
- Crossley, D. (1995). Religious experience within mental illness. Opening the door on research. *The British Journal of Psychiatry, 166*, 284 – 286.
- Dahlem, N. W., Zimet, G. D., & Walker, R. R. (1991). The multidimensional scale of perceived social support: A confirmation study. *Journal of Clinical Psychology, 47*(6), 756-761.
- Danoff-Burg, S., Prelow, H. M., & Swenson, R. R. (2004). Hope and Life Satisfaction in Black College Students Coping with Race-Related Stress. *Journal of Black Psychology, 30*(2), 208–228.
- Derr, A. S. (2016). Mental health service use among immigrants in the United States: A systematic review. *Psychiatric Services, 67*(3), 265-274. doi:10.1176/appi.ps.201500004.
- Devins, G. M., Orme, C. M., Costello, C. G., Binik, Y. M., Frizzell, B., Stam, H. J., & Pullin, W. M. (1988). Measuring depressive symptoms in illness populations: Psychometric properties of the Center for Epidemiologic Studies Depression (CES-D) scale. *Psychology & Health, 2*(2), 139–156.

- de Winter, J. C. F., Dodou, D., & Wieringa, P. A. (2009). Exploratory Factor Analysis with Small Sample Sizes. *Multivariate Behavioral Research, 44*(2), 147–181.
- Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social Indicators Research, 31*(2), 103–157.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71–75.
- Duffy, R. D., & Sedlacek, W. E. (2010). The salience of a career calling among college students: Exploring group differences and links to religiousness, life meaning, and life satisfaction. *The Career Development Quarterly, 59*(1), 27–41.
- Durak, M., Senol-Durak, E., & Gencoz, T. (2010). Psychometric properties of the Satisfaction with Life Scale among Turkish university students, correctional officers, and elderly adults. *Social Indicators Research, 99*(3), 413–429.
- Ekbäck, M., Benzein, E., Lindberg, M., & Årestedt, K. (2013). The Swedish version of the multidimensional scale of perceived social support (MSPSS) - a psychometric evaluation study in women with hirsutism and nursing students. *Health & Quality of Life Outcomes, 11*(1), 1-19. doi:10.1186/1477-7525-11-168.
- Ellis, H. A. (2015). Obeah-illness versus psychiatric entities among Jamaican immigrants: Cultural and clinical perspectives for psychiatric mental health professionals. *Archives of Psychiatric Nursing, 29*(2), 83–89.
- Ellison, C. G., Musick, M. A., & Henderson, A. K. (2008). Balm in Gilead: Racism, religious involvement, and psychological distress among African-American adults. *Journal for the Scientific Study of Religion, 47*(2), 291–309.

- Ensel, W. M., & Lin, N. (1991). The life stress paradigm and psychological distress. *Journal of Health and Social Behavior*, 32(4), 321–341.
- Eryilmaz, A. (2014). Strategies adopted by Turkish adults for increasing happiness in daily life. *Mental Health, Religion & Culture*, 17(7), 680–689.
- Faul, F., Erdfelder, E., Lang, A.-G. & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.
- Fripp, J. A., & Carlson, R. G. (2017). Exploring the Influence of Attitude and Stigma on Participation of African American and Latino Populations in Mental Health Services. *Journal of Multicultural Counseling & Development*, 45(2), 80–94.
- Gibbs, T. A., Okuda, M., Oquendo, M. A., Lawson, W. B., Wang, S., Thomas, Y., & Blanco, C. (2013). Mental health of African Americans and Caribbean Blacks in the United States: Results from the National Epidemiological Survey on alcohol and related conditions. *American Journal of Public Health*, 103(2), 330-338. doi:10.2105/AJPH.2012.300891.
- Giurgescu, C., Misra, D. P., Sealy-Jefferson, S., Caldwell, C. H., Templin, T. N., Slaughter- Acey, J. C., & Osypuk, T. L. (2015). The impact of neighborhood quality, perceived stress, and social support on depressive symptoms during pregnancy in African American women. *Social Science & Medicine*, 130, 172-180. doi:10.1016/j.socscimed.2015.02.006.
- Gordon, J. A. (1994). *Assimilation or Accommodation*. Retrieved from <http://proxy.library.umkc.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED383649&site=ehost-live&scope=site>.

- Gordon, L.R. (2007). Thinking through identities: Black people, race labels, and ethnic consciousness. In Y. Shaw-Taylor, & S.A. Tuch (Eds.), *The other African Americans: Contemporary African and Caribbean immigrants in the United States* (pp. 69-92). Lanham, MD: Rowman & Littlefield Publishers.
- Gordon, M. (1964). *The Nature of Assimilation (Ch3, pp.60-83) in Assimilation in American life*. New York: Oxford University Press.
- Govia, I. O., Paisley-Clare, V., & Palmer, T. (2016). Caribbean research on human development in adolescence and adulthood: Progress and recommended directions. In J. L. Roopnarine & D. Chadee (Eds.), *Caribbean psychology: Indigenous contributions to a global discipline*. (pp. 119–146). Washington, DC: American Psychological Association.
- Greenidge, W. L., & Daire, A. P. (2010). The relationship between emotional openness and the attitudes towards seeking professional counseling of English-speaking Caribbean college students. *International Journal for the Advancement of Counselling, 32*, 191–201. doi:10.1007/s10447-010-9100-6.
- Guan, N., Sulaiman, A., Seng, L., Hway Ann, A., Wahab, S., & Pillai, S. (2013). Factorial validity and reliability of the Tamil version of multidimensional scale of perceived social support among a group of participants in University Malaya Medical Centre, Malaysia. *Indian Journal of Psychological Medicine, 35*(4), 385-388. doi:10.4103/0253-7176.122234.
- Hackney, C. H., & Sanders, G. S. (2003). Religiosity and mental health: A meta-analysis of recent studies. *Journal for The Scientific Study of Religion, 42*(1), 43-55. doi:10.1111/1468-5906.t01-1-00160.

- Hall, S. P., & Carter, R. T. (2006). The relationship between racial identity, ethnic identity, and perceptions of racial discrimination in an Afro-Caribbean descent sample. *Journal of Black Psychology, 32*, 155–175.  
doi:10.1177/0095798406287071.
- Hamren, K., Chungkham, H. S., & Hyde, M. (2015). Religion, spirituality, social support and quality of life: measurement and predictors CASP-12(v2) amongst older Ethiopians living in Addis Ababa. *Aging & Mental Health, 19*(7), 610–621.
- Hayward, R. D., & Krause, N. (2015). Religion and strategies for coping with racial discrimination among African Americans and Caribbean Blacks. *International Journal of Stress Management, 22*(1), 70-91. doi:10.1037/a0038637.
- Hill, P. C., & Pargament, K. I. (2008). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *Psychology of Religion and Spirituality, 5* (1), 3–17.
- House, J. S., Kahn, R. L., McLeod, J. D., & Williams, D. (1985). Measures and concepts of social support. In S. Cohen & S. L. Syme (Eds.), *Social support and health*. (pp. 83–108). San Diego, CA: Academic Press.
- Hovey, J. D. (2000). Psychosocial predictors of acculturative stress in Mexican immigrants. *The Journal of Psychology: Interdisciplinary and Applied, 134*(5), 490–502.
- Hughes, M., Kiecolt, K. J., Keith, V. M., & Demo, D. H. (2015). Racial identity and well-being among African Americans. *Social Psychology Quarterly, 78*(1), 25–48.

- Iglesias, A. (2006). Hypnosis meets Santeria: A case report. *European Journal of Clinical Hypnosis*, 6(4), 41–46.
- Jenkins, S. R., Belanger, A., Connally, M. L., Boals, A., & Durón, K. M. (2013). First-generation undergraduate students' social support, depression, and life satisfaction. *Journal of College Counseling*, 16(2), 129-142. doi:10.1002/j.2161-1882.2013.00032.x
- Jethwani-Keyser, M., Mincy, R., & Haldane, E. (2013). We're graduating, what's next? Relational contribution to the educational attainment of Black Bermudian adolescent boys. *Journal of Black Psychology*, 39(5), 455–485.
- Jones, H. L., Cross, W. J., & DeFour, D. C. (2007). Race-related stress, racial identity attitudes, and mental health among Black women. *Journal of Black Psychology*, 33(2), 208-231.
- Johnson, J. (1994). Henry Maudsley on Swedenborg's messianic psychosis. *The British Journal of Psychiatry*, 165, 690 – 691.
- Joseph, A. E., & Baker, S. B. (2012). Themes Caribbean overseas students perceive influence their levels of culture shock. *College Student Journal*, 46(4), 716–729.
- Joseph, N., Watson, N.N., Wang, Z., Case, A.D., & Hunter, C.D. (2013). Rules of engagement: Public regard and cultural race-related stress as predictors of Black Caribbean immigrants' engagement with African American culture. *Cultural Diversity and Ethnic Minority Psychology*, 19, 414-423.
- Kasinitz, P., Mollenkopf, J., & Waters, M. C. (2002). Becoming American/becoming New Yorkers: Immigrant incorporation in a majority minority city. *International Migration Review*, 36(4), 1020–36.

- Kirmayer, L. J., Gomez-Carrillo, A., & Veissière, S. (2017). Culture and depression in global mental health: An eco-social approach to the phenomenology of psychiatric disorders. *Social Science & Medicine*, *183*, 163–168.
- Koenig, H.G., & Büssing, A. (2010) The Duke University Religion Index (DUREL): A five-item measure for use in epidemiological studies. *Religions*, *1*, 78-85.
- Koenig, H.G., McCullough, M.E., & Larson, D.B. (2001). *Handbook of religion and health*. New York: Oxford University Press.
- Koenig, H., Parkerson, G. R., Jr., & Meador, K. G. (1997). Religion index for psychiatric research. *The American Journal of Psychiatry*, *154*(6), 885–886.
- Kristensen, K. B., Pedersen, D. M., & Williams, R. N. (2001). Profiling religious maturity: The relationship of religious attitude components to religious orientations. *Journal for the Scientific Study of Religion*, *40*(1), 75–86.
- Krumrei, E. J., Pirutinsky, S., & Rosmarin, D. H. (2013). Jewish spirituality, depression, and health: An empirical test of a conceptual framework. *International Journal of Behavioral Medicine*, *20*(3), 327–336.
- Kutek, S. M., Turnbull, D., & Fairweather, S. A. K. (2011). Rural men’s subjective well-being and the role of social support and sense of community: Evidence for the potential benefit of enhancing informal networks. *The Australian Journal of Rural Health*, *19*(1), 20–26.
- Lashley, M. (2000). The unrecognized social stressors of migration and reunification in Caribbean families. *Transcultural Psychiatry*, *37*(2), 201-215.  
doi:10.1177/136346150003700203.

- Levine, D. S., Taylor, R. J., Nguyen, A. W., Chatters, L. M., & Himle, J. A. (2015). Family and friendship informal support networks and social anxiety disorder among African Americans and Black Caribbeans. *Social Psychiatry and Psychiatric Epidemiology*, 50(7), 1121-1133. doi:10.1007/s00127-015-1023-4.
- Lewis, C. A., Shevlin, M. E., Bunting, B. P., & Joseph, S. (1995). Confirmatory factor analysis of the satisfaction with life scale: Replication and methodological refinement. *Perceptual and Motor Skills*, 80(1), 304–306.
- Lee, M. C., Friedmann, E., Kverno, K., Newhouse, R., Zhang, D., & Thomas, S. (2015). Psychological distress among Chinese immigrants to the USA. *International Journal of Culture and Mental Health*, 8(2), 150-161. doi:10.1080/17542863.2014.913643.
- Lincoln, K. D. & Chae, D.H. (2012). Emotional support, negative interaction and major depressive disorder among African Americans and Caribbean Blacks: findings from the National Survey of American Life. *Social Psychiatry & Psychiatric Epidemiology*, 47(3), 361-372.
- Lincoln, K. D., Taylor, R. J., Chae, D. H., & Chatters, L. M. (2010). Demographic correlates of psychological well-being and distress among older African Americans and Caribbean Black adults. *Best Practices in Mental Health: An International Journal*, 6(1), 103-126.
- Lincoln, K. D., Taylor, R., & Chatters, L. M. (2013). Correlates of emotional support and negative interaction among African Americans and Caribbean Blacks. *Journal of Family Issues*, 34(9), 1262-1290. doi:10.1177/0192513X12454655.

- Lincoln, K. D., Chatters, L. M., Taylor, R., & Jackson, J. S. (2007). Profiles of depressive symptoms among African Americans and Caribbean Blacks. *Social Science & Medicine*, *65*(2), 200-213. doi:10.1016/j.socscimed.2007.02.038.
- Livingston, I.L., Neita, M., Riviere, L., & Livinston, S.L. (2007). Gender, acculturative stress and Caribbean immigrants' health in the United States of American: an exploratory study. *West Indian Medical Journal* *56*(3):213-222.
- Longo, G. S., & Kim-Spoon, J. (2013). Homesickness in college students: The role of religion in combating depression. *Mental Health, Religion & Culture*, *16*(5), 489–500.
- Lönnqvist, J., Leikas, S., Mähönen, T. A., & Jasinskaja, L. I. (2015). The mixed blessings of migration: Life satisfaction and self-esteem over the course of migration. *European Journal of Social Psychology*, *45*(4), 496–514.
- Lowe, G. A., Lipps, G., Gibson, R. C., Halliday, S., Morris, A., Clarke, N., & Wilson, R. N. (2014). Neighborhood factors and depression among adolescents in four Caribbean countries. *PLoS ONE*, *9*(4).
- Maneze, D., Salamonson, Y., Attwood, N., & Davidson, P. M. (2014). Acculturative stress in Filipino migrants with functional English: Implications for health promotion. *International Journal of Culture and Mental Health*, *7*(4), 357–369.
- Manning-Walsh J (2005) Social support as a mediator between symptom distress and quality of life in women with breast cancer. *Journal of Obstetric, Gynecologic, & Neonatal Nursing* *34*(4):482–493.
- Marigold, D. C., Cavallo, J. V., Holmes, J. G., & Wood, J. V. (2014). You can't always give what you want: The challenge of providing social support to low self-esteem

- individuals. *Journal of Personality and Social Psychology*, 107(1), 56-80.  
doi:10.1037/a0036554.
- Merz, E.-M., Özeke-Kocabas, E., Oort, F. J., & Schuengel, C. (2009). Intergenerational family solidarity: Value differences between immigrant groups and generations. *Journal of Family Psychology*, 23(3), 291–300.
- Miller, M. J., Kim, J., & Benet-Martínez, V. (2011). Validating the riverside acculturation stress inventory with Asian Americans. *Psychological Assessment*, 23(2), 300–310.
- Morris, R. W., Martin, B., Hopson, J., & Welch-Murphy, K. (2010). "Besides that, I'm Ok": Well-being in Caribbean and American adolescents and youth. *Journal of Research on Christian Education*, 19(1), 56-78.
- Murphy, E. J., & Mahalingam, R. (2006). Perceived congruence between expectations and outcomes: Implications for mental health among Caribbean immigrants. *American Journal of Orthopsychiatry*, 76(1), 120-127.  
doi:10.1037/0002-9432.76.1.120.
- Murray-Johnson, L., Witte, K., Liu, W.-Y., Hubbell, A. P., Sampson, J., & Morrison, K. (2001). Addressing cultural orientation in fear appeals: Promoting AIDS-protective behaviors among Mexican immigrant and African American adolescents and American and Taiwanese college students. *Journal of Health Communication*, 6(4), 335–358.
- National Center for Health Statistics. Health, United States, 2009: with special feature on medical technology. Hyattsville: National Center for Health Statistics; 2010.

- National Center for Health Statistics: Deaths: leading causes for 2006. National Vital Statistics Reports 2010; 58:1-20. [http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58\\_14.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_14.pdf).
- National Institute for Health and Clinical Excellence (NICE). (2009). *Depression in Adults. NICE Clinical Guideline 90*. London: National Health Service.
- Odafe, M. O., Salami, T. K., & Walker, R. L. (2017). Race-related stress and hopelessness in community-based African American adults: Moderating role of social support. *Cultural Diversity and Ethnic Minority Psychology, 23*(4), 561–569.
- Organista, P. B., Organista, K. C., & Kurasaki, K. (2003). The relationship between acculturation and ethnic minority health. In K. M. Chun, P. Balls Organista, & G. Marin (Eds.), *Acculturation: #160; Advances in theory, measurement, and applied research*. (pp. 139–161). Washington, DC: American Psychological Association.
- Pachana, N.A., Smith, N., Watson, M., McLaughlin, D., & Dobson, A. (2008). Responsiveness of the Duke social support sub-scales in older women. *Age and Ageing Journal, 37*, 666-672.
- Painter, J. M., Gray, K., McGinn, M. M., Mostoufi, S., & Hoerster, K. D. (2016). The relationships of posttraumatic stress disorder and depression symptoms with health-related quality of life and the role of social support among veterans. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care & Rehabilitation, 25*(10), 2657–2667.

- Pavot, W. G., Diener, E., Colvin, C. R., & Sandvik, E. (1991). Further validation of the satisfaction with life scale: Evidence for the cross-method convergence of well-being measures. *Journal of Personality Assessment*, *57*(1), 149–161.
- Park, S.-Y., & Bernstein, K. S. (2008). Depression and Korean American immigrants. *Archives of Psychiatric Nursing*, *22*(1), 12–19.
- Pearce, M. J., Little, T. D., & Perez, J. E. (2003). Religiousness and depressive symptoms among adolescents. *Journal of Clinical Child & Adolescent Psychology*, *32*(2), 267.
- Pieterse, A. L., Todd, N. R., Neville, H. A., & Carter, R. T. (2012). Perceived racism and mental health among Black American adults: A meta-analytic review. *Journal of Counseling Psychology*, *59*(1), 1–9.
- Pinder, P. J. (2012). Afro-Caribbean and African American students, family factors, and the influence on science performance in the united states: the untold story. *Education*, *132*(4), 725-738.
- Pozo-Muñoz, C., Salvador-Ferrer, C., Alonso-Morillejo, E., & Martos-Mendez, M. J. (2008). Social support, burnout and well-being in teaching professionals Contrast of a direct and buffer effect model. *Ansiedad y Estrés*, *14*(2–3), 127–141.
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*(3), 385–401.
- Redfield, R., Linton, R., & Herskovits, M.J. (1936). Memorandum for the study of acculturation. *American Anthropologist*, *38*, 149-152.

- Renner, W., Laireiter, A.-R., & Maier, M. J. (2012). Social support as a moderator of acculturative stress among refugees and asylum seekers. *Social Behavior & Personality: An International Journal*, *40*(1), 129–146.
- Revollo, H.-W., Qureshi, A., Collazos, F., Valero, S., & Casas, M. (2011). Acculturative stress as a risk factor of depression and anxiety in the Latin American immigrant population. *International Review of Psychiatry*, *23*(1), 84–92.
- Reynolds, T. (2007). Friendship networks, social capital and ethnic identity: Researching the perspectives of Caribbean young people in Britain. *Journal of Youth Studies*, *10*(4), 383-398. doi:10.1080/13676260701381192.
- Reynolds, T. 2012. "‘Birds of a feather stick together’? Negotiating community, family and intimate relationships between ‘established’ and ‘newcomer’ Caribbean migrants in Britain." *Community, Work & Family* 15, no. 1: 69-84.
- Roh, S., Lee, Y.-S., Lee, J. H., & Martin, J. I. (2014). Typology of religiosity/spirituality in relation to perceived health, depression, and life satisfaction among older Korean immigrants. *Aging & Mental Health*, *18*(4), 444–453.
- Rong, X. L., & Brown, F. (2001). The effects of immigrants’ generation and ethnicity on educational attainment among young African American and Caribbean Blacks in the United States. *Harvard Educational Review*, *71*, 536–565.
- Rueger, S. Y., Malecki, C. K., Pyun, Y., Aycocock, C., & Coyle, S. (2016). A meta-analytic review of the association between perceived social support and depression in childhood and adolescence. *Psychological Bulletin*, *142*(10), 1017–1067.

- Rumbaut, R. G. (1994). The crucible within: Ethnic identity, self-esteem and segmented assimilation among children of immigrants. *International Migration Review*, 28, 748–794.
- Ryder, A.G., Alden, L., & Paulhus, D.L. (2000). Is acculturation unidimensional or bi-dimensional? A head-to-head comparison in the prediction of demographics, personality, self-identity, and adjustment. *Journal of Personality and Social Psychology*, 79, 49-65.
- Ryder, A. G., Alden, L. E., Paulhus, D. L., & Dere, J. (2013). Does acculturation predict interpersonal adjustment? It depends on who you talk to. *International Journal of Intercultural Relations*, 37(4), 502-506. doi:10.1016/j.ijintrel.2013.02.002.
- Sam, D. L., & Berry, J. W. (2010). Acculturation: When individuals and groups of different cultural backgrounds meet. *Perspectives on Psychological Science*, 5(4), 472–481.
- Sanchez, D., & Awad, G. H. (2016). Ethnic group differences in racial identity attitudes, perceived discrimination and mental health outcomes in African American, Black Caribbean and Latino Caribbean college students. *International Journal of Culture and Mental Health*, 9(1), 31-43. doi:10.1080/17542863.2015.1081955.
- Schwartz, S. J., Waterman, A. S., Umaña-Taylor, A. J., Lee, R. M., Kim, S. Y., Vazsonyi, A. T., & ... Williams, M. K. (2013). Acculturation and well-being among college students from immigrant families. *Journal of Clinical Psychology*, 69(4), 298-318.

- Scottham, K. M., & Dias, R. H. (2010). Acculturative strategies and the psychological adaptation of Brazilian migrants to Japan. *Identity: An International Journal of Theory and Research*, 10(4), 284–303.
- Seeman, T. E., Dubin, L. F., & Seeman, M. (2003). Religiosity/spirituality and health: A critical review of the evidence for biological pathways. *American Psychologist*, 58(1), 53–63.
- Seaton, E. K., Caldwell, C. H., Sellers, R. M., & Jackson, J. S. (2008). The prevalence of perceived discrimination among African American and Caribbean Black youth. *Developmental Psychology*, 44(5), 1288-1297. doi:10.1037/a0012747.
- Seaton, E. K., Caldwell, C. H., Sellers, R. M., & Jackson, J. S. (2010). Developmental characteristics of African American and Caribbean Black adolescents' attributions regarding discrimination. *Journal of Research on Adolescence*, 20(3), 774-788.
- Shaw-Taylor, Y. (2007). The intersection of assimilation, race, presentation of self. In Y. Shaw-Taylor, & S. A. Tuch (Eds.). *The other African Americans: Contemporary African and Caribbean immigrants in the United States* (pp. 1-48). Lanham, MD: Rowman & Littlefield Publishers.
- Shapiro, S., & Wilk, M. (1965). An analysis of variance test for normality (complete samples). *Biometrika*, 52(3/4), 591-611. doi:10.2307/2333709.
- Simpson, J. S., & Parsons, E. C. (2009). African American perspectives and informal science educational experiences. *Science Education*, 93(2), 293-321.
- Smith, T. B., McCullough, M. E., & Poll, J. (2003). Religiousness and depression: evidence for a main effect and the moderating influence of stressful life events. *Psychology Bulletin*, 129, 614 – 636.

- Smokowski, P., Evans, C., Cotter, K., & Guo, S. (2014). Ecological correlates of depression and self-esteem in rural youth. *Child Psychiatry & Human Development, 45*(5), 500–518.
- Sohail, Z., Bailey, R. K., & Richie, W. D. (2014). Misconceptions of depression in African Americans. *Frontiers in Psychiatry, 5*.
- Sood, E.D., Mendez, J.L. & Kendall, P.C. (2012). Acculturation, religiosity and ethnicity predict mothers' causal beliefs about separation anxiety disorder and preferences for help-seeking. *Journal of Cross-Cultural Psychology, 43*(3) 393–409. doi: 10.1177/0022022110389492.
- Storch, E. A., Strawser, M. S., & Storch, J. B. (2004). Two-week test-retest reliability of the Duke Religion Index. *Psychological Reports, 94*(3, Pt1), 993–994.
- Suinn, R. M., Rickard-Figueroa, K., Lew, S., & Vigil, P. (1987). The Suinn-Lew Asian self-identity acculturation scale: An initial report. *Educational and Psychological Measurement, 47*(2), 401–407.
- Suinn, R. M., Ahuna, C., & Khoo, G. (1992). The Suinn-Lew Asian self-identity acculturation scale: Concurrent and factorial validation. *Educational and Psychological Measurement, 52*(4), 1041–1046.
- Superville, D. J. (2015). Caribbean blacks and acculturative stress: The moderating role of religious coping. *Dissertation Abstracts International Section A: Humanities and Social Sciences*. ProQuest Information & Learning.
- Swami, V., & Chamorro-Premuzic, T. (2009). Psychometric evaluation of the Malay satisfaction with life scale. *Social Indicators Research, 92*(1), 25–33.

- Taylor, R. J., Chae, D. H., Lincoln, K. D., & Chatters, L. M. (2015). Extended family and friendship support networks are both protective and risk factors for major depressive disorder and depressive symptoms among African-Americans and Black Caribbeans. *Journal of Nervous and Mental Disease, 203*(2), 132-140. doi:10.1097/NMD.0000000000000249.
- Taylor, R., Chatters, L. M., & Nguyen, A. W. (2013). Religious participation and DSM IV major depressive disorder among Black Caribbeans in the United States. *Journal of Immigrant and Minority Health, 15*(5), 903-909. doi:10.1007/s10903-012-9693-4
- Taylor, R. J., Chatters, L. M., Woodward, A. T., & Brown, E. (2013). Racial and ethnic differences in extended family, friendship, fictive kin, and congregational informal support networks. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 62*(4), 609-624. doi:10.1111/fare.12030
- Taylor, R.J., Chatters, L., & Joe, S. (2011). Non-organizational religious participation, subjective religiosity, and spirituality among older African Americans and Black Caribbeans. *Journal of Religion & Health, 50*(3), 623-645. doi:10.1007/s10943-009-9292-4
- Taylor, R. J., & Chatters, L. M. (2010). Importance of religion and spirituality in the lives of African Americans, Caribbean Blacks and non-Hispanic Whites. *Journal of Negro Education, 79*(3), 280-294.
- Taylor, R. J., Chatters, L. M., & Jackson, J. S. (2007a). Religious and spiritual involvement among older African Americans, Black Caribbeans and non-

- Hispanic whites: Findings from the National Survey of American Life. *Journal of Gerontology Social Sciences*, 62B, S238–S250.
- Taylor, R. J., Chatters, L. M., & Jackson, J. S. (2007b). Religious participation among older Black Caribbeans in the United States. *Journal of Gerontology Social Sciences*, 62B, S251–S256.
- Thomas, O. N., Caldwell, C. H., Faison, N., & Jackson, J. S. (2009). Promoting academic achievement: The role of racial identity in buffering perceptions of teacher discrimination on academic achievement among African American and Caribbean Black adolescents. *Journal of Educational Psychology*, 101, 420–431.  
doi:10.1037/a0014578
- Thomas-Hope, E. (2000). Trends and patterns of migration to and from the Caribbean. *International Migration and Development in the Americas*, 58-70.
- Thompson, C. P., Anderson, L. P., & Bakeman, R. A. (2000). Effects of racial socialization and racial identity on acculturative stress in African American college students. *Cultural Diversity and Ethnic Minority Psychology*, 6(2), 196–210.
- Thornton, M. C., Taylor, R. J., & Chatters, L. M. (2013). African American and Black Caribbean mutual feelings of closeness: Findings from a national probability survey. *Journal of Black Studies*, 44(8), 798–828.
- Torres, E. (2012). Psychometric properties of the Center for Epidemiologic Studies Depression Scale in African American and Black Caribbean US Adults. *Issues in Mental Health Nursing*, 33(10), 687-696.

- Torres, L., & Rollock, D. (2004). Acculturative distress among Hispanics: The role of acculturation, coping, and intercultural competence. *Journal of Multicultural Counseling and Development, 32*(3), 155–167.
- Trejos-Herrera, A. M., Bahamón, M. J., Alarcón-Vásquez, Y., Vélez, J. I., & Vinaccia, S. (2018). Validity and reliability of the multidimensional scale of perceived social support in Colombian adolescents. *Psychosocial Intervention, 27*(1), 56–63.
- Tsuboi, H., Hirai, H., & Kondo, K. (2016). Giving social support to outside family may be a desirable buffer against depressive symptoms in community-dwelling older adults: Japan gerontological evaluation study. *BioPsychoSocial Medicine, 10*.
- Venner, H.A. (2015). *Dissertation Abstracts: Challenging Mental Health Concerns among Black Caribbean Immigrants*.
- Vickerman, M. (1994). The responses of West Indians to African Americans: Distancing and identification. *Research in Race and Ethnic Relations, 7*, 83-128.
- Wang, J.-L., Gaskin, J., Wang, H.-Z., & Liu, D. (2016). Life satisfaction moderates the associations between motives and excessive social networking site usage. *Addiction Research & Theory, 24*(6), 450–457.
- Waters, M. C. (1994). Ethnic and racial identities of second-generation Black immigrants in New York City. *International Migration Review, 28*(4), 795-820.
- Waters, M. (1999). *Black identities: West Indian immigrant dreams and American realities*. New York, NY: Russell Sage Foundation.
- Waters, M. C., Kasinitz, P., & Asad, A.L. (2014). Immigrants and African Americans. *Annual Review of Sociology, 40*, 369-390.

- World Health Organization. (2013). *The World Health Report 2013*. Geneva: World Health Organization.
- Walker, R. L., Wingate, L. R., Obasi, E. M., & Joiner, T. E., Jr. (2008). An empirical investigation of acculturative stress and ethnic identity as moderators for depression and suicidal ideation in college students. *Cultural Diversity and Ethnic Minority Psychology, 14*(1), 75–82.
- Walker, R. L. (2003). An investigation of acculturative stress and ethnic identification as risk factors for suicidal ideation in African-American vs Anglo-American men and women: The moderating effects of religiosity and social support. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. ProQuest Information & Learning.
- Walker, R. L. (2007). Acculturation and acculturative stress as indicators for suicide risk among African Americans. *American Journal of Orthopsychiatry, 77*(3), 386–391.
- Wheeler, D. P., & Mahoney, A. M. (2008). Caribbean Immigrants in the United States--Health and Health Care: The Need for a Social Agenda. *Health & Social Work, 33*(3), 238–240.
- Williams, D.R., Haile, R., Gonza'lez, H.M., Neighbors, H., Baser, R., & Jackson, J.S. (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* (15) 305. doi:10.1001/archpsyc.64.3.305.

- Wilson, E. S. (2009). What It Means to become a United States American: Afro-Caribbean immigrants' constructions of American citizenship and experience of cultural transition. *Journal of Ethnographic & Qualitative Research*, 3(3), 196-204.
- Wrobel, N. H., Farrag, M. F., & Hymes, R. W. (2009). Acculturative stress and depression in an elderly Arabic sample. *Journal of Cross-Cultural Gerontology*, 24(3), 273–290.
- Yang, L., Jia, C.-X., & Qin, P. (2015). Reliability and validity of the Center for Epidemiologic Studies Depression Scale (CES-D) among suicide attempters and comparison residents in rural China. *BMC Psychiatry*, 15.
- Yeh, C. J. (2003). Age, acculturation, cultural adjustment, and mental health symptoms of Chinese, Korean, and Japanese immigrant youths. *Cultural Diversity and Ethnic Minority Psychology*, 9(1), 34–48.
- Yoon, E., Langrehr, K., & Ong, L. Z. (2011). Content analysis of acculturation research in counseling and counseling psychology: A 22-year review. *Journal of Counseling Psychology*, 58(1), 83–96.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30.
- Zimet, G.D., Powell, S.S., Farley, G.K., Werkman, S. & Berkoff, K.A. (1990). Psychometric characteristics of the Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 55, 610-17.

Zong, J., & Batalova, J. (2016). Caribbean immigrants in the United States. *The Online Journal of the Migration Policy Institute*. Retrieved from <http://www.migrationpolicy.org/article/caribbean-immigrants-united-states/>

## VITA

Shavern Tracelyn Browne was born on 21<sup>st</sup> February, 1978 on the twin island federation of St. Christopher and Nevis. She shares a birthday with her deceased aunt Lucia Richardson, a person she identifies as a most influential person in her life. She received a B.A. in Forensic Psychology with a minor in Counseling from John Jay College of Criminal Justice in May 2011. Shavern entered the University of Missouri-Kansas City's (UMKC) Counseling Psychology Ph.D. program in Fall 2011 and received her M.A. in Counseling and Guidance en route. While at UMKC Shavern was involved in many social justice advocacy and peer mentoring organizations including Counselors for Social Justice and Life Coach Mentoring.

Clinical practicum training for Shavern included student therapist positions in Kansas City Care Clinic (an integrated care community health center), Truman Medical Center-Behavioral Health Inpatient, Kansas City Medical Counseling and Educational Support Services, University of Missouri-Kansas City Health, Testing and Disabilities Center and University of Missouri-Kansas City Community Counseling and Assessment Services.

Shavern is a member of the American Psychological Association Graduate Students, a member of other divisions of APA (52-International Psychology, 45- Society for the Psychological Study of Culture, Ethnicity and Race, 35.1- Society for the Psychology of Women [African American], and 17-Counseling Psychology) and interim treasurer of CADIPsych (CANPA Diaspora and Individual Psychologists) a division of CANPA (The Caribbean Alliance of National Psychological Associations). She was recognized as the UMKC School of Education's most outstanding doctoral student in

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