9-8-2025

Coping Self-Efficacy, Acculturation, Gender, Socioeconomic Status, and Perceived Discrimination as Predictors of Depression Among Nigerian Immigrants in the United States

Olatunde O. Osibote
Walden University

Walden University

College of Allied Health

This is to certify that the doctoral dissertation by

Olatunde O. Osibote

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Carlos Diaz-Lazaro, Committee Chairperson, Psychology Faculty
Dr. Olga Carranza, Committee Member, Psychology Faculty

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

Walden University
2025

Abstract

Coping Self-Efficacy, Acculturation, Gender, Socioeconomic Status, and Perceived Discrimination as Predictors of Depression Among Nigerian Immigrants in the United States

by

Olatunde O. Osibote

MS, Walden University, 2018

BS, Ashford University, 2016

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

October 2025

Abstract

Nigerian immigrants represent one of the fastest-growing immigrant populations in the United States. Relocating to a new country can be a major source of stress, often increasing individuals' vulnerability to mental health challenges. While considerable research has examined predictors of depression in the general population and among certain immigrant groups, limited attention has been given to these factors in the context of Nigerian immigrants in the U.S. This study aimed to address that gap by applying Berry's acculturation theory to investigate predictors of depression within this population. A quantitative, cross-sectional, correlational survey design was used to examine whether acculturation, socioeconomic status, gender, coping self-efficacy, and perceived discrimination predict depression. Using a nonprobability convenience sampling method, 111 participants were recruited to complete the survey. Results from multiple regression analysis identified coping self-efficacy as the only statistically significant predictor of depression. Although perceived discrimination was positively correlated with depression in bivariate analyses, it did not remain significant in the multiple regression model. These findings suggest that enhancing coping self-efficacy may be a key protective factor against depression. The study's implications for positive social change include encouraging mental health professionals to design targeted support programs that build psychological resilience and promote well-being among Nigerian immigrant communities in the United States.

Coping Self-Efficacy, Acculturation, Gender, Socioeconomic Status, and Perceived Discrimination as Predictors of Depression Among Nigerian Immigrants in the United States

by

Olatunde O. Osibote

MS, Walden University, 2018

BS, Ashford University, 2016

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

October 2025

Dedication

I dedicate this dissertation to the extraordinary individuals who have been the pillars of strength, inspiration, and unwavering support throughout my academic journey. First and foremost, to my beloved parents, Doctor Elizabeth Adejoke Osibote and Chief Oluwasegun Stephen Osibote. Your lifelong dedication to ensuring that your children were nurtured with education, discipline, and moral clarity has shaped the very core of who I am. You believed in my potential long before I did and made the selfless decision to bring me to the United States to pursue higher education. Your guidance, sacrifices, and unshakeable faith in me know no bounds, and for that, I am forever grateful.

To my incredible wife, Tamara Osibote, thank you for being the unwavering support I needed through this demanding journey. Whether it was staying up late with our children, managing the household during deadlines, or simply encouraging me when I felt overwhelmed, you carried the weight of our world with grace and strength. Your love, partnership, and belief in me have been my anchor. Without you, this milestone would not have been possible. You are my love, my confidant, my strength, and my greatest blessing. To my amazing children, thank you for being patient, loving, and inspiring. Your laughter, questions, and resilience gave me purpose through every challenge. You are the foundation on which I stand tall. I love you all deeply.

Acknowledgments

This milestone would not have been possible without the unwavering support of some truly remarkable individuals in my life. First and foremost, I give all glory and thanks to God, the ultimate provider and protector. His divine grace has sustained me through every challenge and triumph, guiding me to this point in my journey.

I am profoundly grateful to my exceptional chair, Dr. Carlos M. Diaz-Lazaro, whose kindness, wisdom, and mentorship have been instrumental throughout this process. Your consistent encouragement during difficult times and the time you dedicated to every stage of my academic development made all the difference. There were moments I doubted whether I would make it this far, but your belief in me reignited my determination. Your dedication to my success will never be forgotten—you are truly an inspiration, sir. I extend my sincere appreciation to my co-chair, Dr. Carranza, for your patience and steady support. Your belief in my capabilities reminded me that I was indeed worthy of this journey.

A special thanks to everyone who participated in the success of this study. Your willingness to share my survey across platforms helped bring this research to life.

Lastly, to my friends and fellow cohorts who supported me through this journey or who are going through this journey as well, thank you for your unconditional support and knowledge sharing. I appreciate you all.

Table of Contents

List of Tables

Chapter 1: Introduction to the Study

Migrating into a new country can be a significant stressor. Immigrants are commonly confronted by the challenges of resettling into a new country, and often with the stressors of having limited language skills, education, or employment opportunities (Wong & Miles, 2014). Despite understanding life stressors that contribute to the poor mental health of immigrants, there has been little research identifying the factors associated with depression among Nigerian immigrants living in the United States. The lack of research has contributed to treatment interventions that fail to account for the sociocultural aspects of Nigerian immigrants living in the United States. Moving to a well-developed and modernized environment helps some immigrants improve their livelihood. Unfortunately, a considerable number of immigrants struggle to adjust. Ekwemalor and Ezeobele (2020) found that insufficient knowledge about the United States and inadequate pre-immigration preparation are the main factors responsible for immigrants' mostly negative, psychosocial experiences of immigration. Other factors that are likely to negatively contribute to immigrants' experiences in the new country include lack of employment, poor educational level, and the stress associated with cultural adaptation. Immigrants who settle for menial jobs while attending school face substantial financial and psychological stress, which minimize the benefits of living in a developed society (Ekwemalor & Ezeobele, 2020).

Depression is more than just sadness. People with depression may experience a lack of interest and pleasure in daily activities, significant weight loss or gain, insomnia or excessive sleeping, lack of energy, inability to concentrate, feelings of worthlessness

or extreme guilt, and recurrent thoughts of death or suicide (American Psychiatric Association, 2013. While the prevalence of depression is lower in immigrants than U.S.-born individuals (Ikonte et al., 2020), being an immigrant in the U.S. for more than 15 years increases the risk of depression to the point of surpassing that of U.S.-born individuals.

I evaluated the relationship between several factors and depression among Nigerian immigrants living in the United States. The focus was on factors associated with depression, as understood within Berry's acculturation framework. The chapter begins with an overview of the literature on factors contributing to depression, particularly among Nigerian immigrants residing in the United States. The problem statement section explores the limitations of the existing literature in identifying factors linked to depression within this population. The purpose of the study is outlined, and the research questions and hypotheses are described. An overview of Berry's acculturation model is provided in the theoretical framework section. The final sections of the chapter include the nature of the study, its significance, definitions of key concepts, and the study's limitations.

Background

In the United States, Nigerian immigrant population is growing at a fast rate. However, there is little research on the post-migration mental health of Nigerians (Ekwemalor & Ezeobele, 2020). One factor to consider is culture. There is a strong cultural influence on how Nigerians view mental health and depression. For example, many Nigerian immigrants do not believe in depression, even if they report depressive

symptoms (Ekwemalor et al., 2019). The mental health of Nigerian immigrants should be a health priority in the United States, especially since depression is the most common mental health disorder among people (American Psychiatric Association, 2013). Immigrants are 17% more likely to have serious psychological disorders after living in the United States for an extended period (Ikonte et al., 2021). Mental illness impacts approximately 18% of adults in the United States, and studies estimate that major depression accounts for 4.6% of mental illness. Lack of literature and research data about the mental health of the Nigerian immigrants living in the United States is problematic; the longer an immigrant lives in the United States, the higher their chances of suffering from depression or other serious psychological distress (Ikonke et al. 2021).

Few articles have been presented to identify factors that predict depression among African immigrants living in the United States. Unfortunately, these studies have not presented a clear picture of this problem. For example, Saasa and Miller (2021) addressed depression among African immigrants, although they did not analyze results per specific nationality. They found that approximately 22% of African immigrants reported depression and anxiety symptoms in the moderate to severe range. Male gender, substance use, discrimination, and loneliness were significantly associated with higher levels of depression and anxiety. Results were based on the African immigrant population without considering the cultural, religious, political, and geographical differences of the African immigrant population. Some of the reports presented by Saasa and Miller (2021) show that the differences in culture, norms, tradition, beliefs, and social structure of immigrants can influence depression or depressive symptoms. The underrepresented

Nigerian immigrant groups fall into this category. In a similar study, Nkimberng and colleagues (2021) used a general sample of African immigrants to understand the correlates of depression. These authors found clinical depression present among 8.1% of African immigrant participants after migrating to a different country. The study only focused on older African immigrants with a mean age of 62. Though the study accounted for depressive symptoms, including trouble falling asleep, the results did not significantly represent the population in focus. There is very limited available data representing the Nigerian immigrant population, and more studies are needed.

Some of the studies on depression among Nigerian immigrants are qualitative and thus do not directly address prediction. Two phenomenological studies by Ezeobele and colleagues (2010, 2019) must be discussed. Perception of depression among Nigerian immigrants influences their view of depressive symptoms and evidence suggests that the low report of depression among Nigerian immigrants is linked with their perception of depression and depressive symptoms (Ezeobele et al., 2019). Though Nigerian male immigrants reported depressive symptoms, they refused to believe depression exists but instead called the symptoms demonic attacks (Ezeobele et al., 2019). A similar study on depression was conducted to understand Nigerian female immigrants' views on depression. The report shows that Nigerian female immigrants negatively perceive depression and report depressive symptoms as witchcraft and demonic attacks (Ezeobele et al., 2010). After moving to the United States, Nigerian women are faced with multiple tasks, including taking care of household chores, children, and sometimes becoming the head of the household. The new role and cultural adjustment are drastic changes that can

lead to depression. However, depression is not perceived as something in need of attention by this specific population. Ezeobele et al. (2010) found that Nigerian women find depression signs of weakness, madness, and cause for isolation. Furthermore, the study found that this group's lack of mental health education influenced their understanding of depression, which can affect their mental health if not handled properly on depression and depressive symptoms. Though both studies presented an argument that the perception of Nigerian male and female immigrants can negatively influence the report of depressive symptoms even when they show signs, there was no concrete report that shows the influence of depression among the population. The importance of this study is that it provided possible factors that can influence depression among the proposed population.

Limited study on depression among the Nigerian immigrant group will have significant ramifications for treating depression among this specific group. This study highlighted the factors that predicted depression among Nigerian immigrants living in the United States. It is important to note that the findings of this study focused specifically on Nigerian immigrants in the United States, rather than on immigrants from other African countries or Nigerians residing in their home country. Furthermore, the results from this study provided insight into preventative measures that may help support and maintain mental health during the process of adjusting to life in a new country.

Problem Statement

Nigerian immigrants are among the fastest growing populations in the United States (Ekwemalor & Ezeobele, 2020). There is very little information on the mental

health needs of this vulnerable population (Ekwemalor et al., 2019). For example, even for a diagnosis such as depression, one of the most prominent mental disorders, the available literature is inconsistent on its effects among Nigerian immigrants (Ekwemalor & Ezeobele, 2020; Ezeobele et al., 2010). Particularly troubling is the lack of clear understanding about the relationship among cultural factors, the coping styles used to adjust to the new environment, and depression among this population. Nigerian immigrants tend to ignore the concept of depression as understood by clinical psychologists (Ekwemalor et al., 2019).

On the other hand, traditional Nigerian beliefs are based not on Western medicine but on a varied host of explanations such as demonic, spiritual, or laziness (Ezeobele et al., 2010). Studies have also found that acculturation has been linked to stress-related psychological disorders such as depression (Gonidakis et. al., 2011). Acculturative stress is likely to result in depression or other mental health problems. Another factor that has been associated with depression is socioeconomic status (SES). SES affects individuals' ability to make life choices such as health, housing, transportation, and everyday living. In addition, Nigerian immigrants faced the stigma associated with being an ethnic minority. Perceived discrimination might be one of the most endemic and enduring stressors facing people of African descent in the United States (Lincoln & Chae, 2010). Unfortunately, knowledge of how Nigerian immigrants cope with these challenges has not been documented in the psychological literature. The present study aimed to address this gap by assessing if gender, SES, acculturation, perceived discrimination, and coping

styles predicted depressive symptomatology among Nigerian immigrants in the United States.

Understanding the factors influencing depression among Nigerian immigrants living in the United States is relevant for the field of clinical psychology for various reasons. The first reason is that the Nigerian immigrant population is becoming one of the largest in the United States (Ekwemalor & Ezeobele, 2020). Their health and mental wellbeing are underrepresented, likely presenting barriers to treatment. Secondly, understanding the factors associated with depression and the successful coping styles utilized by Nigerian immigrants can inform clinical treatment for this vulnerable population. Another justification for this study is to further the clinical and cultural competency of psychologists working with Nigerian immigrants in the United States. Psychologists planning to provide services, teach, or conduct research involving populations, areas, techniques, or technologies new to them should undertake relevant education, training, supervised experience, consultation, or study (American Psychological Association, 2017, Section 2.01c).

Purpose of the Study

The purpose of this study was to examine and identify factors predicting depression among Nigerian immigrants living in the United States. More specifically, the research evaluated whether gender, level of acculturation, SES, coping styles, and perceived discrimination were predictive of depressive symptomatology in this population. The relationships among some of these variables had been previously studied in other immigrant groups, but not extensively among Nigerian immigrants. The

uniqueness of this study lay in its focus on the factors associated with depression specifically within the Nigerian immigrant community. The population's distinct social, cultural, economic, and political background was likely to influence the presentation of depressive symptomatology and coping styles in ways that differed from other immigrant groups.

Research Question and Hypotheses

RQ: What is the contribution of Acculturation, Gender, SES, Coping Self-efficacy, and Perceived Discrimination to the statistical variance in Depression Among Nigerian Immigrants in the United States?

H_1: Acculturation to the United States culture, as measured by the Vancouver Index of Acculturation (VIA) scale, will be negatively correlated with depression as measured by the Patient Health Questionnaire-9 (PHQ-9).

H_2: SES, as measured by the sociodemographic survey, will be negatively correlated with depression, as measured by the Patient Health Questionnaire-9 (PHQ-9).

H_3: Perceived discrimination, as measured by the Everyday Discrimination Scale (EDS), will be positively correlated with depression as measured by the PHQ-9.

H_4: Coping self-efficacy, as measured by the Coping Self-Efficacy Scale (CSES), will be negatively associated with depression as measured by the PHQ-9.

H_5: Men will score higher than women on depression, as measured by the PHQ-9.

Theoretical Framework for the Study

This dissertation's theoretical framework was Berry's (1990) acculturation model. Acculturation is defined as "the process by which individuals change both by being influenced by contact with another culture and by being participants in the general acculturative changes underway in their own culture" (Berry, 1990, pp. 234-235). Berry's acculturation model is categorized into four different sections. When an immigrant migrates to another country with another majority culture, one strategy that can be applied is assimilation. According to Berry (2008), assimilation strategy is when individuals do not wish to maintain their cultural identity and seek daily interaction with other cultures, particularly the majority culture of the host country. This strategy helps immigrants adjust to their new world, utilizing the host's culture as their primary culture. The second strategy is the separation alternative; Berry (2008) described this strategy as a strategy that is applied when individuals place a value on holding on to their original culture and at the same time wish to avoid interaction with others from the host country.

This strategy helps keep the memory and culture of the mother culture with very little influence from the host's culture. Some individuals would like to keep their mother culture and at the same time show interest in learning the new one. Integration is employed when there is an interest in maintaining one's original culture while in daily interactions with other groups. Individuals who apply integration tend to keep some cultural integrity while they seek to become a member of a larger and dominant group of the host nation. Berry (2008) described marginalization as the lack of interest in maintaining native cultural heritage as well as adapting to the host culture. This is often

caused by enforced cultural loss, and little interest in having relations with others due to exclusion or discrimination.

The four categories are integration, assimilation, separation, and marginalization. The model addresses how immigrants balance their known cultural environment and the new one. Integrating, Assimilating, separating, and marginalizing the concept of both the mother culture and adopted culture helps shape their coping style in the adopted culture. The model addresses the research question of this study, which was, Does acculturation predict depression? Berry's (1990) acculturation model plays a role in understanding how acculturation can predict depression among Nigerian immigrants living in the United States. Immigrants have a different experience in adjusting to their new environment. Berry's acculturation theory will be an explanatory framework for understanding the role of culture, particularly the conflict between different cultural worldviews that Nigerian immigrants face in adapting to the challenges of a new culture.

Nature of the Study

I used a quantitative, cross-sectional correlational survey design to examine predictors of depression among Nigerian immigrants living in the United States. Coping style, acculturation, gender, SES, and perceived discrimination served as the predictor variables, while depression functioned as the criterion variable.

Definitions

Following are key terms and their definitions as used in the context of this study, with interchangeable usage noted:

Acculturation: "The process by which individuals' change both by being influenced by contact with another culture and by being participants in the general acculturative changes underway in their own culture" (Berry, 1990, pp. 234–235). It is also a set of cultural and psychological changes that follow the contact between two cultural groups and their members (Berry, 2005).

Assimilation strategy: The type of acculturation strategy employed by immigrants who do not wish to maintain their cultural identity but seek daily interaction with the host culture (Berry, 2008).

Coping self-efficacy: The confidence one has in their ability to carry out various coping strategies and execute a course of action designed to manage an external stressor (Chesney et al., 2016). "Coping self-efficacy" is used interchangeably with "coping styles" in this study.

Depression: A serious medical illness that negatively affects how a person feels, thinks, and acts (American Psychiatric Association, 2013). Examples of depressive symptoms are lack of interest and pleasure in daily activities, significant weight loss or gain, insomnia or excessive sleeping, lack of energy, inability to concentrate, feelings of worthlessness or extreme guilt, and recurrent thoughts of death or suicide (American Psychiatric Association, 2000, 2013).

Discrimination: Unfair or prejudicial treatment of people and groups based on characteristics such as race, age, gender, or sexual orientation (American Psychological Association, 2019). Discrimination and perceived discrimination appear interchangeably

in this study. An example of discrimination is people are treated harshly based on their skin color.

Gender: The attitudes, feelings, and behaviors that a given culture associates with a person's biological sex (American Psychological Association, 2012).

Integration strategy: The type of strategy employed by immigrants to help maintain their native culture while simultaneously learning the host country's culture (Berry, 2008). Integration strategy allows immigrants to keep their cultural identity and learn the host country's culture.

Separation strategy: A strategy that is the opposite of the assimilation strategy. Immigrants use this strategy to reject the host culture. Separation strategy enables individuals to hold on to their original culture while avoiding interaction with individuals from the host country (Berry, 2008).

Marginalization strategy: A strategy that is employed by immigrants who reject both their native culture and the new or host culture. This option often suggests reasons for enforced cultural loss and exclusion or discrimination (Berry, 2008).

Migrants: An umbrella term, not defined under international law, reflecting the common lay understanding of a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons (International Organization for Migration, 2021). Migrants and immigrants appear interchangeably in this study. An example of a migrant or immigrant is someone who leaves their origin country to go to another

country. For this study, our focus is on Nigerian immigrants who migrated from Nigeria to the United States.

Socioeconomic status (SES): The social standing or class of an individual or group. It is often measured as a combination of education, income, and occupation (American Psychological Association, 2021).

Assumptions

The first assumption was that participants would respond to the questions honestly and to the best of their abilities. Honest responses were considered essential for drawing valid conclusions from the data. The second assumption was that the survey would be self-explanatory, allowing respondents to fully understand and comprehend each statement and question. The third assumption was that all participants were Nigerians who met the criteria of immigrants currently residing in the United States.

Scope and Delimitations

I recruited Nigerian immigrants aged 18 and older who were living in the United States. Individuals who were younger than 18 were excluded from participation. Those of African descent who were not Nigerian were also deemed ineligible, as the research focused exclusively on Nigerian immigrants residing in the United States. Immigrants from other ethnic backgrounds were not recruited for this study. Participants were asked about their length of stay in the United States; however, no one was excluded based on this factor. The inclusion criterion was residency in the United States, regardless of how long participants had lived there.

Limitations

I used a cross-sectional correlational design to provide an overview of the factors predicting depression among the Nigerian immigrant population living in the United States. One challenge encountered was the collection of data through web-based survey platforms. A known limitation of the cross-sectional design is its inability to establish cause-effect relationships between variables (Parker & Berman, 2016). Additionally, the study relied on self-report measures, which are susceptible to social desirability bias, potentially affecting the accuracy of participants' responses.

Significance

The literature on acculturation, SES, and perceived discrimination as predictors of depression among Nigerian immigrants living in the United States is limited. The significance of this study lay in its effort to address a gap in the literature by evaluating several factors—such as acculturation, SES, and perceived discrimination—as potential predictors of depression among Nigerian immigrants living in the United States. While these factors had been previously examined in other immigrant populations, the findings remained inconclusive for Nigerian immigrants specifically.

The results of this study provided valuable insights for practicing clinical psychologists and clinical psychology graduate programs on how to incorporate culturally responsive strategies, techniques, and interventions tailored to the needs of this marginalized population. The study's practical relevance extended to the training of future practitioners and the development of cultural competencies that could enhance therapeutic outcomes for Nigerian immigrants living in the United States. By identifying

the factors that predicted depression within this population, the study contributed to potential social change, the promotion of positive coping strategies, and the advancement of multicultural competence among psychologists and psychology trainees working with Nigerian immigrants.

Summary

Migration is beneficial for those who wish to explore other countries or change their lifestyle for educational, economic, and political purposes. People migrate from their mother country to another for different reasons. Some migrate to a more developed and advanced country to benefit from the economic structure of the other country. Some migrate to avoid the political unrest in their mother country. Immigrants who migrate from one country to another can be at risk of depression due to lifestyle changes. The purpose of this quantitative correlational study was to examine if coping style, acculturation, gender, SES, and perceived discrimination, can predict depression among Nigerian immigrants living in the United States. Berry's acculturation theory was used to understand the variables examined and to help predict strategic outcomes for preventing depression. A total of 111 male and female participants were recruited through SurveyMonkey to complete the survey, which measured acculturation, coping style, SES, and perceived discrimination. This study contributed to positive social change by increasing awareness of the factors associated with depression among Nigerian immigrants living in the United States, as well as highlighting potential protective factors that could be leveraged in clinical and community settings. Chapter 2 of the study

presented the literature search strategy, outlined the theoretical foundation, and provided a comprehensive review of the key variables related to the research topic.

Chapter 2: Literature Review

Introduction

Nigerian immigrants are among the fastest growing populations in the United States (Ekwemalor & Ezeobele, 2020). Unfortunately, there is very little information on the mental health needs of this vulnerable population (Ekwemalor et al., 2019). This has presented a significant challenge for identifying and understanding predictors of depression among this population. Cultural differences, lack of knowledge about the adopted country, lack of perceived control over their future and that of their family, contribute to the negative psychosocial immigration experience of Nigerians (Ekwemalor & Ezeobele, 2020). However, there is a lack of clear understanding about the relationship among cultural factors, the coping styles used to adjust to the new environment, and depression among this population.

The purpose of this study was to examine and identify factors predicting depression among Nigerian immigrants living in the United States. More specifically, the research evaluated whether gender, level of acculturation, SES, coping styles, and perceived discrimination predicted depressive symptomatology among this population. Although some of these factors had been previously examined in other immigrant groups, it remained unclear whether these same variables applied to the unique experiences of Nigerian immigrants.

This literature review chapter begins with a description of the search strategies used to identify relevant sources. Following the discussion of search strategies, Berry's acculturation theory is presented as the theoretical framework for the study. The central

propositions of Berry's theory, along with relevant research articles, are identified and discussed. A rationale for the relevance of this theory in the context of the study's purpose is also provided. Subsequently, the chapter includes a review of the literature related to the key study variables: gender, acculturation, SES, coping styles, and perceived discrimination, and their relationship with depressive symptomatology. Particular attention is given to empirical studies that addressed the social and mental health needs of Nigerian immigrants in relation to these variables. Finally, a summary of the literature findings and the major conclusions drawn from the review are presented.

Literature Search Strategy

I conducted an online search for different journal articles focusing on immigration, acculturation, and depression. The following databases were accessed via the Walden university library: ERIC, SAGE Journal, Academic Search Premier, ProQuest Dissertation and Theses Global, ProQuest central, PsycARTICLES, PsychBOOK, PsycINFO, and Walden University's Thoreau multi-database search tool. The empirical sources included in my research were publications from 1980 to the present. Finally, Google Scholar, and Ebrary were used as the secondary search engines for documents that may have been omitted or overlooked in the aforementioned academic databases search.

Searched terms used in this review include *depression, depressive symptoms, acculturation, acculturative stress, acculturation theories, immigration, migration stress, immigration laws, Nigerian culture, Nigerian immigrants, African immigrants, United States, Nigerians living in the United States, Africans living in the United States*. Within

these searches, other key terms included *coping styles, stress management, protective factors against depression, predictors of depression, signs of depression, immigration status, social relationship, African males, African females, Nigerian males, Nigerian females,* and *SES.* Also, a careful review of reference sections from additional articles pertinent to the topic was relevant because there is a little literature review that focuses on my selected population.

Theoretical Foundation

Berry's acculturation model was the core theoretical foundation of this research study. This model was considered within the broader context of scholarly interest in the processes of immigration and cultural adaptation. Researchers have long sought to understand how individuals from diverse cultural backgrounds adjust to life in a new country or culture. Acculturation was defined as a process of cultural and psychological change resulting from the interaction between two or more cultural groups (Berry, 1997); it has been widely used to explain how immigrants adapt to a host culture that differs from their own. In this section, the major propositions of Berry's acculturation model were presented, followed by a review of key empirical findings related to the model. Lastly, a rationale for the relevance of using Berry's model as the theoretical foundation for this study was provided, highlighting its applicability to understanding the mental health experiences of Nigerian immigrants in the United States.

Major Propositions of the Model

Acculturation has been studied by many scholars. Various frameworks have been proposed. However, Berry's model stands as the most prominent and best known. Berry's

(1990) acculturation model will be used to explain the adaptation process of Nigerian immigrants living in the United States. The main thrust of this framework is the four adaptation strategies: integration, assimilation, separation, and marginalization. The adaptation strategies explain the different ways immigrants adjust to a new environment and culture after migrating. Berry's model and its associated strategies emerged from my interest in understanding the interaction between the issues of cultural maintenance, or importance of keeping one's native culture, and cultural contact and participation, or becoming involved with other cultural groups (Segall et al., 1999).

Based on the cultural maintenance and participation issues discussed above, two questions become relevant for understanding the possible strategies adopted by individuals who are adapting to a new cultural environment: 1) does the individual value maintaining the native culture's identity and characteristics; 2) does the individual value establishing and maintaining a relationship with the host or new culture (Segall et al., 1990). According to Berry (2008), the *assimilation strategy* involves individuals who do not wish to maintain their cultural identity but seek daily interaction with the host culture. Immigrants use this strategy as an adjustment technique that enables them to focus strictly on using the host culture as they interact with the host culture. Individuals who adopt the *assimilation* strategy immerse in the host's culture while de-identifying with their native culture. The *separation* alternative is the opposite form of assimilation strategy. Berry (2008) explained that separation strategy enables individuals to hold on to their original culture while avoiding interaction with individuals from the host country. Immigrants who choose separation strategy keep their cultural identity without

interference from the host country's culture. The ability to maintain a native culture while simultaneously learning the host country's culture is another strategy that immigrants can employ. This strategy, according to Berry (2008), is called the *integration* strategy. *Integration* strategy allows immigrants to keep their cultural identity and learn the culture of the host country. According to Berry (2008), the fourth strategy is *marginalization*, in which the immigrant rejects both his native culture and the new or host culture. This option often suggests reasons of enforced cultural loss and exclusion or discrimination.

Berry's acculturation model proposes that the different strategies will result in distinct psychological outcomes. The effective psychological adaptation of the individual in the host or dominant culture will be associated with the adopted strategy. Segall et al. (1999) state that "acculturation strategies have been shown to have substantive relationships with positive adaptation: Integration is usually the most successful; marginalization is the least, and assimilation and separation are intermediate" (p. 309). In the next section, empirical studies testing this and associated propositions will be presented.

Literature Review Related to Key Variables and/or Concepts

This study proposed coping styles, gender, SES, and perceived discrimination as key variables that could predict depression among Nigerian immigrants in the United States. In this section, a review of empirical articles examining the relationship between the hypothesized predictor variables and depression (the criterion variable) was presented. The section began with an overview of the literature on depression and its relevance in understanding the lived experiences of Nigerian immigrants.

Depression

The American Psychiatric Association (2013) defined depression as a serious medical illness that negatively affects how a person feels, thinks, and acts. Depression is associated with changes in people's mood (i.e., sadness and negative affect) and loss of interest in things people usually find enjoyable. For some individuals, major depression can result in severe impairments that interfere with or limit one's ability to carry out major life activities (National Institute of Mental Health, 2021). The American Psychological Association (2021) stated that people with depression may experience a lack of interest and pleasure in daily activities, significant weight loss or gain, insomnia or excessive sleeping, lack of energy, inability to concentrate, feelings of worthlessness, or excessive guilt and recurrent thoughts of death or suicide. Depression can be caused by different life events, such as losing someone or something, and the symptoms can vary from mild to severe.

Symptoms must be persistent for at least 2 weeks and must represent a change in the previous level of functioning for a diagnosis of major depression (American Psychiatric Association, 2013). Depression is very different from grief or bereavement because depression lasts longer and makes it more challenging to function physically and mentally. Depressive disorders include disruptive mood dysregulation disorder, major depressive disorder, persistent depressive disorder, premenstrual dysphoric disorder, substance/medication-induced depressive disorder, depressive disorder due to another medical condition, other specified depressive disorder, and unspecified depressive disorder (American Psychiatric Association, 2020). Depression affects an estimated one

in 15 adults (6.7%) in any given year, and one in six people (16.6%) will experience depression at some time in their life (American Psychiatric Association, 2013). For this study, we will not focus on specific depressive disorders but on general depressive symptomatology.

Factors Associated With Depression

Different factors can influence or play a role in depression. The American Psychiatric Association (2013) identified four risk factors for depression: (a) biochemistry (changes in brain chemicals leading to depressive symptoms), (b) genetics (traits that run in the family and can be passed from parents to children), (c) personality (people who get easily overwhelmed by stress or are generally pessimistic), and (d) environmental factors (continuous exposure to violence, neglect, poverty, and abuse).

Genetic Factors. A genetic explanation of depression assumes that the potential for the presentation of depressive disorders is passed from parents to children. The genetic mapping of a parent suffering from depression can be passed on to a child. However, symptoms may not surface until environmental factors are introduced and trigger their presentation. The genetic factor is usually diagnosed after a family's medical history is collected and a parent or grandparents are noticed to suffer from depression. The TMEM106B, RAB27B, GMPPB, and NEGR1 genes are identified to affect depression by influencing protein and gene expression levels, which could guide future research on candidate genes investigations in animal studies as well as prioritize antidepressant drug targets (Deng et. al., 2022).

Biological Factors. Not only can genetics influence depression, but biological factors also play a role in the presentation of depressive symptoms. Persistent changes in chemical production in the brain can cause depressive symptoms, leading to depression. Nowadays, depression is considered a systemic illness with different biological mechanisms involved in its etiology, including inflammatory response, hypothalamic-pituitary-adrenal (HPA) axis dysregulation, and neurotransmitter and neurotrophic systems imbalance (Nedic Erjavec et al., 2021). Endocrine glands secrete different types of hormones which are released into the blood. Hormones travel to every aspect of the body, including the brain. A problem with the endocrine system can cause a change in chemical production in the brain, which can affect the brain neurons and cause depressive symptoms. Older age and physical or other medical illnesses can also be risk factors in diagnosing depression. Half of the patients with severe depression have a disturbed glucocorticoid feedback mechanism, and many exhibit hypercortisolism.

Environmental Factors. Researchers have evaluated the relationship between environmental factors and depression. Sanchez and Sanchez (2020) suggest that today's clinician should address social and environmental factors that might be etiologically relevant to the current episode or to the future course of the depression in order to customize treatment and optimize the outcome. A study was conducted on a family of adopted twins to determine the prevalence of major depression if one twin was raised by a biological relative and the other twin was raised by a relative of suitably matched individuals with no history of depression. This study aimed to understand if environmental factors can influence depression in a child with a family history of

depression. The results showed that the presence of genetic factors combined with environmental factors could influence depression. Results suggest that environmental factors may play an essential role in disease susceptibility. “Findings from another study shed light on genetic and environmental mechanisms that are common and unique to distress and fear and contribute to current knowledge on individuals’ susceptibility to anxiety and depression” (Moreau-Vaillancourt et al., 2020).

Environmental factors include SES, demographics, sociocultural groups, employment, relationships, geographical location, access to education, and medical care. Environmental factors tend to play a role in depressive symptoms. Though the systematic assessment of psychosocial stressors was eliminated in the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM–5*; American Psychiatric Association, 2013), there is evidence that primary support group problems, occupational problems, and childhood adversity effectively predicted increased risks of depressive episodes and suicidal ideation (Sanchez & Sanchez, 2020).

Decendorf and colleagues (2020) conducted a content analysis of 327 videos about depression representative of material on the YouTube social media platform. The purpose of this analysis was to provide a critical review of messages, images, and information concerning depression, causes, continuum conceptualization, timeline, curability, coping/treatment regimen, and strengths. Though this study appears to be a theme analysis based on what people believe, the results suggest that depression is often caused by either biological (49.5%) or environmental (41.3%) factors.

Immigrants face a significant environmental change after migrating to a new country. Environmental change can lead to different stressors. Researchers have evaluated how stressors and depressive symptoms affect immigrants. Studies from Zapata-Roblyer et al. (2017) examined the level of depression symptoms and psychosocial factors among immigrant Latinas in a new environment. One in six participants (17.5%) met the criteria for elevated depressive symptoms. SES has been found to be negatively correlated with depression (Dover, 2012); a regression model revealed that psychosocial and environmental/economic stressors served as the most significant predictor of depression.

Davison et al. (2019) conducted a study to examine depression and socioeconomic, health, immigration, and nutrition-related factors in older adults living in Canada. The study utilized cohort data from the Canadian baseline longitudinal study on the aging of adults between 45-85, with gender-specific logistic regression, and cross-sectional data using variables: immigration status (native-born, recent, and long-term immigrants), SES, health behavior, nutrition, and diet intake. Samples from 27,162 individuals were used to complete the study. The results showed that the odds of developing depression were highest among immigrant women. In addition, depression in middle-aged and older adults was also associated with socioeconomic, physical, nutritional, and gender factors (Davison et al., 2019). Since research shows that depression exists among immigrants and is higher among female immigrants (David et al., 2019), it is necessary to evaluate depressive symptoms among the Nigerian immigrant population using gender as a variable. As immigrants living in a host country like the

United States, it is vital to understand how lack of tools or poor adjustment to the new environment can influence or contribute to depression among this specific immigrant group. These environmental factors may affect immigrants differently based on gender and other demographics.

Socioeconomic Status

SES is the social standing or class of an individual or group. It is often measured as a combination of education, income, and occupation (American Psychological Association, 2021). The SES of an individual can influence health outcomes. Level of personal income can reflect social resources such as medical resources, economic resources, and interpersonal resources (Smith & Kington, 1997). SES is associated with depression in older adults with little or no income. Hence, older adults with low income have a higher risk of depression (Xue et al., 2021). Researchers have studied the role SES plays in the health and lifestyle of individuals. SES has been found negatively correlated with depression among older adults (Xue et al., 2021). More specifically, the lower the SES, the higher the risk of depression. Furthermore, a health-promoting lifestyle mediates the relationship between SES and depression (Xue et al., 2021). SES has also been found to mediate stress and anxiety, which are more proximal to depression, and to trigger the SES–depression relationship (Post et al., 2013). SES has a strong negative relationship with depression (Post et al., 2013), particularly among female smokers when controlled for gender and health behaviors.

SES can also influence the health of children and young adults who are living in low-income societies. Studies have shown that the probability of being in the poorest

health profile type group was progressively higher as social class declined (Starfield et al., 2002). Findings suggests an association between low family income and young people's depressive symptom trajectories in the United States. This is consistent with the relationship between greater income inequality and worse child and adolescent outcomes (Minh et al., 2021).

Painter and Qian (2016) conducted a longitudinal study to better understand the economic well-being among immigrants living in the United States. The study utilized assimilation theory and data from the New Immigrant Survey to explore wealth inequalities among immigrants of different races and ethnic backgrounds. The sample for the study constituted 8,573 Legal Permanent Residence (LPR), but with restrictions on participants that did not report race or ethnic status, 8,387 samples were used. Minority immigrants encountered varying degrees of obstacles, including their nonwhite racial status, which limited their opportunities to increase their financial wellbeing. In comparison, results showed that white immigrants successfully transitioned into U.S. society and began purchasing assets and accumulating wealth (Painter & Qian, 2016).

Low SES can also affect how immigrants adjust to a new host country. For example, SES has been found to have a direct relationship with the burden of disease and an indirect relationship with systolic blood pressure in adult immigrants in the United States (Dawson et al., 2021). Studies have aimed to investigate the impact low-income, or income inequalities have on immigrants after migration. Income inequality exerts a statistically significant negative effect on immigrant's health trajectory after migration (Maskileyson, 2019). Immigrants with poor SES tend to have poor health outcomes over

time after migrating to a new country. Income inequality has a long-lasting harmful effect on health. That is, early childhood exposure to high-income inequality has health consequences that continue to unfold later in life, even among people who leave their birth country ((Maskileyson, 2019). Not only will low SES lead to health consequences later in life, SES has also been presented to be strongly correlated to depression among late-life immigrants (Guo et al.,2019).

SES can influence how immigrants acculturate. Acculturation is negatively correlated with depression when controlled by SES (Janssen-Kallenberg et al., 2017). Acculturation is a long-term process for any immigrant hoping to start a new life in a host country. Nigerian immigrants with low SES can struggle to acculturate, especially older immigrants, and older age and low SES were most consistently related to higher risks of depressive disorder (Janssen-Kallenberg et al., 2017). This study will attempt to show how SES can influence depression among Nigerian immigrants living in the United States.

Gender

Gender refers to the attitudes, feelings, and behaviors that a given culture associates with a person's biological sex (American Psychological Association, 2012). Masculinity is represented by the term "male" femininity by "female." Recently, the new term of nonbinary emerged to classify people who identify as either male or female. Gender identity is defined in humans and animals. Researchers have conducted series of studies to evaluate gender roles in depression. Halonen and colleagues (2018) conducted a study to examine gender-specific mental health profiles for large occupational groups.

Gendered occupational status was used to explain distinctive mental health profiles. Samples were obtained from a random register cohort of the Finnish working-age population, individuals in the six largest occupational groups in 2004 for men and women ($N = 414\ 357$). Register data were used to define the first antidepressant purchase, the first long-term sickness absence (S.A) spell for depression, and suicide, between Jan 1st, 2005 and Dec 31st, 2014. The risk of each outcome was assessed by an occupational group with logistic regression models and used dominance analysis to compare the relative importance of predictors. The results show that gendered occupational status was an underlying factor explaining distinctive mental health profiles in the working population, and in all six occupational groups, the prevalence of antidepressant use and sickness absence (S.A) for depression was higher in women than in the men's occupational groups (Halonen et al., 2018).

Perceived Discrimination

Discrimination is described as unfair or prejudicial treatment of people and groups based on characteristics such as race, age, gender, or sexual orientation (American Psychological Association, 2019). Perceived discrimination can then be considered a situation where someone feels he or she is being discriminated against. Perceived discrimination has consistently been associated with diminished mental health, but the psychological processes underlying this link are less well understood (Matheson et at., 2019). Discrimination is negatively associated with mental health, including depressive symptoms (Johnson-Lawrence et al., 2020). Different studies have been conducted to

determine the impact of discrimination on people's health and welfare, especially the health of minority groups and immigrants.

Tineo et al. (2021) presented a study to investigate if acculturative stress can mediate the relationship between perceived discrimination and depression and anxiety symptoms and examine the moderating roles of Muslim identity and religious support. An online survey of 205 Muslim college students was used to complete the study. Perceived discrimination, depression, acculturative stress, generalized anxiety, religious support, Muslim identity, and major depression was measured. Results showed that higher perceived discrimination was significantly associated with higher acculturative stress, major depression, and generalized anxiety disorder symptoms (Tineo et al., 2021).

Racial discrimination has been identified as a correlate of poor mental health in racial/ethnic minority populations, including African Americans (Johnson-Lawrence et al., 2021). A cross-sectional analysis was conducted to evaluate whether education moderated associations between discrimination and depression risk within a southern Black/African American cohort in a labor market shifting from manufacturing and farming to education-intensive industries, such as health care and technology. The study used 2001 data from Pitt County Study of North Carolina to collect samples from Black men and women living in eastern North Carolina. A total of 1154 adult participants between the ages of 25 and 50 years old were used. The results showed that education was protective for depression risk related to discrimination for men but not women, and racial discrimination remained a stressor in the everyday lives of African Americans regardless of education level (Johnson-Lawrence et al., 2020).

Coping

Immigrants' adjustments to the new country's way of life involve developing effective coping mechanisms. Lazarus and Folkman (1987) defined coping as a cognitive and behavioral step taken by individuals in response to perceived demands and stressors. People experience different events in life, and their ability to handle the events can determine the outcome of such events. How individuals cope with the experiences determines the outcome of the effect of such demand or stress.

Some researchers have conducted studies to determine the relationship between coping and depression and its outcomes. For instance, a study conducted with pregnant women who used coping strategies during the COVID-19 pandemic and found that they were less likely to experience depression (Firouzbakht et. al., 2022). Another study conducted with patients receiving methadone maintenance therapy (MMT) suggested that coping strategies alongside high levels of perceived social support, and active and emotion-focused support, served as a buffer against depression (Wahab et. al., 2021). Coping strategies have also been shown to improve the psychosocial functioning of depressive patients (Pătru et. al., 2021).

Acculturation

Immigrants living in a new country go through an adjustment process known as acculturation. Berry (1990) defined acculturation as the process by which individuals change both by being influenced in the contact with another culture and by being participants in the general acculturative changes underway in their own culture. How immigrants adjust to the host country determines their success there. Acculturation has

been shown to influence different adjustment outcomes among immigrants in new countries. For example, according to Chapagai and Martyn-Nemeth (2022), immigrants in the United States have poor sleep health, and that acculturation and acculturative stress may be major influencing factors. Immigrants in a new country must adjust to life, culture, belief system, and government structure. Moving to a new culture, especially if there are differences in the primary language, diet, dress, etc., can create difficulties in acculturation (Bhugra et. al., 2021).

Many researchers, including Bridges et. al. (2021), have concluded that they found no association between acculturation and depression. However, they also advise that researchers should carefully consider the limitations of various acculturation measures when assessing their associations with other variables as significant moderators were found in different acculturative strategies. Other researchers, like Driscoll and Torres (2022), have concluded that there is further evidence of the beneficial role of heritage-culture acculturation and suggest that focused versus generalized forms of acculturative stress may be a distinguishing component related to depression. Nigerian immigrants living in the United States acculturate to the American culture and way of life in order to find their new home satisfying. This study will attempt to use acculturation as a predicting factor for depression among Nigerian immigrants living in the United States.

Summary and Conclusions

Although there is existing literature that shows that acculturation has been linked to stress-related psychological disorders such as depression (Gonidakis et al., 2011), there is very little information on the mental health needs of the Nigerian immigrant population

living in the United States (Ekwemalor et al., 2019). More specifically, the existing literature does not examine whether SES, gender and level of acculturation can predict depression among Nigerian immigrants living in the United States. This review of the literature focused on identifying how empirical research informs our understanding of factors that may contribute to depression among Nigerians. Though SES has been found to be negatively correlated with depression, a regression model revealed that the SES components of psychosocial and environmental/economic stressors served as the greatest predictor of depression (Dover, 2012).

The acculturation process of immigrants can influence depression. Nigerians can also struggle with depression and other mental illnesses in their home country (Adewuya et al., 2018). Nigerian older adults are not exempted; findings suggest that late-life depression among Nigerians is associated with health and socioeconomic factors worth paying attention to in a region of economic deprivation and inadequate health care (Baiyewu et al., 2015). Alternatively, the mental health of Nigerian immigrants in the United States is unknown; there may be differences in mental health and depression symptoms among Nigerians when living in Nigeria or a host country like the United States. This study will attempt to fill the gap in the literature that has to date failed to recognize or identify the mental health status of this population.

In this chapter, acculturation theory and depression were reviewed. Literature on Berry's acculturation theory was presented, and its relationship to factors predicting depression among Nigerian immigrants living in the United States was outlined. This study addressed a gap in the literature, which had previously failed to examine the

relationship between SES and depression among Nigerian immigrants living in the United States post-migration. Additionally, the study explored the impact of depression when Nigerian immigrants encountered acculturative stress, low SES, and perceived discrimination. Furthermore, preventative factors and strategies that could be employed to mitigate depression and stress within this population were considered.

Chapter 3: Research Method

Introduction

The purpose of this quantitative study was to examine the contribution of acculturation, gender, SES, coping self-efficacy, and perceived discrimination to the statistical variance in depression among Nigerian immigrants in the United States. A cross-sectional correlational survey design was employed to assess potential predictors of depression within this population. The research design and the rationale for its selection are discussed, along with a detailed explanation of the sampling procedure and the analysis used to determine the appropriate sample size for the study. Informed consent procedures, participant recruitment, the use of the SurveyMonkey platform for survey distribution, controlled group survey distribution, and data collection protocols among Nigerian immigrants are outlined. A description of the validity and reliability of the instruments used for data collection is provided, along with the data analysis plan. The chapter concludes with a description and explanation of the ethical procedures followed throughout the study and the potential threats to validity that were addressed.

Research Design and Rationale

In this study, I examined the contribution of acculturation, gender, SES, coping self-efficacy, and perceived discrimination (independent variables) to the statistical variance in depression (dependent variable) among Nigerian immigrants living in the United States. To achieve this purpose, a quantitative research methodology was selected. Quantitative analysis involves the numerical representation and manipulation of observations to describe and explain the phenomena those observations reflect (Babbie,

2017). A quantitative approach was deemed appropriate for this study because it allowed for the identification and analysis of relationships between variables, thus providing a suitable method for answering the research questions.

The accuracy of the results in this quantitative research depended on the ability to detect either cause-and-effect relationships in the case of experimental or quasi-experimental designs, or the prediction of a criterion variable in correlational designs (Urban & Van Eeden-Moorefield, 2018). Given the correlational nature of this study, the focus was placed on examining statistical relationships and predictive value among the identified variables.

A quantitative cross-sectional correlational survey design was selected for this study. A quantitative approach is the most suitable approach for this study because it uses a numeric representation to reflect relationships between multiple variables. Unlike qualitative research that produces narrative or textual descriptions of the phenomena under study, quantitative research specifies numerical assignment to the phenomena under study (VanderStoep et al., 2009). In contrast, a qualitative method is not suitable for this study because it focuses on the meanings of experiences by exploring how people define, describe, and metaphorically make sense of experiences (VanderStoep et al., 2009). Quantitative research, on the other hand, assumes that there is a knowable reality and knowledge that can be observed at a larger scale, and qualitative research does not give room for large-scale study because of the vested interest in meaning.

A qualitative research design is unsuitable for this study because it is not used for prediction or assumption testing; it focuses on the social and cultural construction of

meaning and taps into people's interpretations of their experiences (VanderStoep et al., 2009). I incorporated the quantitative method because it gives room for assumptions, and the findings from the samples under study will more accurately reflect the overall population from which the sample was drawn (VanderStoep et al., 2009).

A cross-sectional correlational survey design was proposed to examine the relationships between the study's variables and assess if depression is predicted by acculturation, coping style, SES, gender, and perceived discrimination. The cross-sectional research design addresses our need to document facts or collect data at a single moment in time (Ruane, 2016). This study proposed the assessment of relationships among multiple variables, and thus there is a need for a research design allowing the collection of various information at a time. A cross-sectional design was more appropriate for this study because it allows me to collect multiple measurements at the same point in time. Using a cross-sectional design, researchers can gather data on all pertinent variables via a singular data collection effort (Ruane, 2016). The ability to collect multiple data at the same point in time makes cross-sectional correlational design less time consuming and less expensive, which are additional factors to making it the best option for this study.

Methodology

Population

The target population were first and second-generation adult Nigerian immigrants residing in the United States. Adult men and women who were born in Nigeria and now live in the United States were included in the study as well as Nigerians whose parent

figures were born in Nigeria but who now live in the United States. Nigerians living in Nigeria were included. Africans from other African countries residing in their African countries or United States were not included in this study. There were 1,581,970 African immigrants living in the United States between 2008-2012. Nigerian immigrants are estimated to comprise 221,075 (U.S. Census Bureau, 2014). Department of Homeland Security (2020) reported Nigerian born immigrants as the largest African immigrant group with 12,398 people to obtain lawful permanent resident status in the United States and over 100,000 between 2011 and 2020.

Sampling and Sampling Procedures

Probability sampling would be ideal for most quantitative studies. Simple probability sampling, for example, provides all members of the target population the same chance of being selected for the study (Cozby & Bates, 2015). Probability sampling is the standard methodology for large-scale surveys intended to support scientific studies and decision-making for government policy and can be used to produce estimates of population characteristics without the problem of selection bias (Salkind, 2007). One of the core advantages of using probabilistic sampling involves its ability to better represent the target population. However, this sampling method is very costly. Furthermore, gaining access to the full list of the target population is likely to be very complicated, especially for vulnerable populations such as Nigerian immigrants.

An alternative to probabilistic sampling is nonprobabilistic sampling, where the probability of selecting a member of the target population is not known. Nonprobabilistic sampling strategies tend to be quite arbitrary and thus are usually described as

"convenient" (Cozby & Bates, 2015). Convenience sampling is based on the inability to statistically sample the entire population, and thus the results may not accurately represent the total population (Urban et al., 2018). Estimates of population characteristics based on convenience samples are affected by selection bias (Salkind, 2007). Advantages of nonprobabilistic sampling include that it is inexpensive, efficient, and convenient. For the purposes of this study a nonprobabilistic quota sampling was used. Quota sampling involves collecting a specific percentage within a population (Cozby & Bates, 2015). For the purposes of this study, quota sampling focused on gender, age groups, and migration status (first- and second-generation immigrants).

Conducting a quantitative analysis requires a certain level of certainty and accuracy due to the question of probability. The validity and accuracy of a measured construct in quantitative research require a level of confidence. To attain a level of confidence, statistical power needs to be employed. Statistical power is the probability that a test of the null hypothesis of no effect will successfully reject the null hypothesis when a nonzero average treatment effect exists (Hedges et al., 2010). Power analyses help predict the validity and accuracy of the results. Statistical power can be described as the overlap between a sampling distribution of a population parameter under the null hypothesis and a sampling distribution under an alternative hypothesis (Scherbaum & Pesner, 2019).

Power and sample size go hand in hand in a quantitative research study. The larger the size, the stronger the power analysis. A large sample size reduce low type II error rates. The *power* of a test for any effect size greater than zero (when the null

hypothesis is false and the hypothesis true) is the probability that the test will lead to rejection of the null hypothesis, thus providing support for the underlying theory (Kraemer & Blasey, 2016). For this study, a power analysis was conducted to estimate the sample size while considering the confidence level, statistical power, and effect size, as these are crucial in yielding a low error rate. To calculate sample size, the G*power 3.1.9.6 application was utilized. The G*power application was created by (Faul et al., 2007; 2009). G*Power is a tool used to compute statistical power analyses for many different *t*-tests, *F* tests, $\chi 2$ tests, *z* tests, and some exact tests, and can also be used to compute effect sizes and to display the results of power analyses graphically (Faul et al., 2007; 2009).

G*power was used for this study because it determines the sample size by calculating the power using multiple variables (Faul et al., 2007). Conducting a multiple linear regression is appropriate for this study because it allows the use of multiple variables (coping style, acculturation, SES, gender, and perceived discrimination) to predict the dependent variable (depression). The following parameters were entered in G*Power for a multiple regression fixed model R^2 (deviation from zero): a) effect size of .15 (medium), b) alpha error probability of .05, c) power of .95, and d) 5 predictors. The software estimated a sample size of 138 participants would be needed. However, in order to account for missing data, outliers, and other challenges, a sample size of 160 was targeted.

Procedures for Recruitment, Participation, and Data Collection

Participants were recruited online throughout the United States using Survey Monkey and a controlled group of participants from a church. Survey Monkey is an online software used to collect and analyze data online, and it is one of the most prominent online surveys that can connect to over 15 million people (Survey Monkey, 2021). Participants were recruited via Survey Monkey and an advertisement flyer posted the researcher's social networks. SurveyMonkey facilitated reaching the targeted population on a broader scale. Participants recruited In addition, the researcher developed a flyer which will be disseminated on social networks to expand my population search. The advertisement was posted on Facebook, Twitter, and Instagram. The post contained information on the purpose of the study, participants' criteria, and my contact information. Participants did not receive compensation for completing the survey.

Participants were not asked to provide personal identifying information such as names and addresses. Data collection was anonymous. However, the survey required participants to state their general demographic information such as age, gender, place of birth, ethnicity, current location type (urban/city, suburban, rural), and nationality. All collected data was password-protected, and only the primary researcher and the dissertation committee had access to the information.

Informed consent was collected from all participants beforehand. The informed consent was in line with the ethical standards and included the nature and purpose of the study. According to section 8.02 of the American Psychological Association ethical principles and code of conduct (2017), psychologists must inform research participants

about the purpose, expectations, procedures, right to decline, potential risk, and confidentiality relating to a study. Electronic access to informed consent was provided to all participants before the start of the survey so that they may choose to either participate or decline. Participants who accepted were provided with surveys after signing the consent form. Participants who chose to decline did not receive the survey.

The informed consent was accessible through the SurveyMonkey website along with the survey, so that participants do not lose interest if they have to navigate through different platforms. Study surveys include the sociodemographic survey, VIA scale, PHQ-9, and Perceived Racism/Discrimination Subscale. The surveys are combined into one single-survey format link for participants to click and complete without navigating through different hyperlinks. The purpose of a single-format study is to reduce participants' time to complete the survey, reduce frustration, and make the survey more efficient.

The target sample size was 138 participants. However, the survey remained open until a total of 160 participants was reached, a quantity determined through power analysis. This larger sample size was intended to account for potential missing data, outliers, and other possible challenges that could arise during data compilation. Once the target number of responses was obtained, the data were entered into the IBM SPSS program for statistical analysis. The SPSS data file was stored in a password-protected folder to ensure data security and confidentiality.

Instrumentation and Operationalization of Constructs

The study's hypothesis focused on acculturation, SES, gender, perceived discrimination, and coping style as predictors of depression. A sociodemographic survey was used to assess gender, age, and other relevant sociodescriptive variables. A detailed description of the instruments used to measure these constructs was subsequently provided.

Sociodemographic Survey

The survey included questions regarding participants' age, gender, religion, family support, SES, and migration status).

Vancouver Index of Acculturation

The scale was designed to assess several domains relevant to acculturation, including values, social relationships, and adherence to traditions (Ryder et al., 2000). The VIA utilized two dimensions—the heritage and the mainstream cultures—to assess an individual's orientation toward their cultural background and the adopted culture. In the original VIA, items were generated in pairs based on content areas, with one item in each pair referring to Chinese culture and the other referring to North American culture (Ryder et al., 2000). For the purpose of this study, the items originally referencing Chinese culture were modified to reflect Nigerian cultural contexts.

The VIA instruments include a 20-item rated on a 9-point scale ranging from 1= *Strongly disagree*, to 9= *strongly agree*. A sample statement is "I would be willing to marry a person from my 'heritage culture.' I would be willing to marry a North American 'person'. I believe in my 'heritage culture'. I believe in mainstream North American

values" (p.65). VIA uses a sample heritage dimension coefficient alpha reliability = .91, .92, and .91 for Chinese, East Asian, and Miscellaneous, respectively. Sample mainstream dimension coefficient alpha reliabilities = .89, .85, and .87 for Chinese, East Asian, and Miscellaneous, respectively (Ryder et. al., 2000). Data analyses in the present study was conducted by computing the full-scale scores. Full-scale scores for the VIA run from 20 to 180, with low scores indicative of low bicultural integration and high scores indicative of high bicultural integration.

Ryder et al. (2005) conducted a validity sample test using the VIA (Ryder et al. 2000) to analyze the reliability and validity of the VIA. The VIA was used to measure acculturation, and the subscales 'heritage' and 'mainstream' showed a strong correlation. Ryder et al (2005) conducted another study to understand and explore the role of acculturation on sexual permissiveness and sexual functions among Asian women residing in Canada. VIA was used to compare responses between Asian and Euro-Canadian groups in hopes to understand if acculturation is captured as unique information not predicted by ethnic group affiliations (Ryder et al., 2005). Results showed that acculturation to Western culture, as well as maintained affiliation with traditional Asian heritage, were both significantly and independently related to sexual attitudes above and beyond length of residency in Canada, and beyond ethnic group comparisons. The VIA is a reliable instrument with high internal consistency and scale integrity that can be utilized for this study. The VIA subscales have yielded reliability scores of .79 and .75 (Cronbach's alpha).

Patient Health Questionnaire-9

This instrument is a self-administered version of the PRIME-MD diagnostic instrument for common mental disorders which is used to make criteria-based diagnoses of depressive and other mental disorders commonly encountered in primary care (Kroenke et. al., 1999). The PHQ-9 was designed to measure depression among people 18 years and older. The purpose of the PHQ-9 was to assess the presence of depressive disorder diagnoses as well as depressive severity (Kroenke et. al., 1999). The PHQ-9 consists of nine statements based on the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*) depressive disorder criteria. As the criteria for major depression disorder did not change from the *DSM-IV* to the *DSM-5* revision, the scale can be considered as a valid criterion for evaluation of the *DSM-5* as well. Responses are based on a 4-point Likert scale, with values ranging from 0 (*not at all*) to 3 (*nearly every day*). A full-scale score will be computed for statistical analysis. Full-scale scores for the PHQ-9 range from 0 to 27 with low scores indicating low levels of depression and high scores indicating higher levels of depression.

The PHQ-9 is a reliable instrument that was used in this study. The internal reliability of the PHQ-9 was reported with a Cronbach's alpha value of .89. (Wisting et al., (2021) presented Confirmatory Factor Analysis (CFA) that revealed mediocre fit for a one-factor structure of the PHQ-9, regardless of diagnostic status (chi-square 27[N = 762]. 211.188; p = 0.00; CFI = .95; TLI = .94; RMSEA = 0.095; [0.08–0.11]; SRMR = 0.107).

Coping Self-Efficacy Scale

This instrument is a self-reporting 26-item questionnaire that measures one's own perceived ability to cope effectively with life changes (Chesney et al., 2006). The scale provides the ability to assess a person's coping self-efficacy changes over time (Chesney et al., 2006). CSES uses an 11-point scale to evaluate people's ability to cope. The overall score derived from the questionnaire is computed by combining the ratings across all items, with higher scores indicating a greater degree of confidence in one's coping ability (Chesney et al., 2016).

Chesney et al. (2006) analyzed the reliability and validity of the CSES. Three subscales, including (a) use problem-focused coping, (b) stop unpleasant emotions and thoughts, and (c) get support from friends and family, were measured. The study included 348 HIV-seropositive participants with depressed moods who were randomly selected into intervention and comparison conditions. Pre- and post-intervention measures were conducted to measure their coping self-efficacy. Internal reliability coefficients (Cronbach's alpha) were reported at .91 for problem-focused coping, .91 for stop unpleasant emotions and thoughts, and .80) for the subscale (3) get support from friends and family subscale. An interval consistency and test-retest reliability show consistency for all three factors (Chesney et al., 2006).

Chesney et al. (2015) conducted a study using the CSES to assess the relationship between a set of self-efficacy variables and variables assessing attitudes towards counseling. The study constituted 253 first-year college students between the ages of 18 and 20 at a small, private, Catholic university, in the northeastern region of the United

States. The instrument included an 11-point Likert-type response scale with options including 0 (*cannot do it all*), 5 (*moderately certain can do*), and 10 (*certain can do*). A modification was made to include 8 = often certain can do, 9 = most often certain can do (Chesney et al., 2015). Results of the study showed a high negative loading on career decision self-efficacy (r = -.93), coping self-efficacy (r = -.80), and career counseling (r = -.97), and medium negative on attitudes towards seeking psychological help. The results reflected that low self-efficacy was associated with negative attitudes towards counseling for 1st-year college students (Chesney et al., 2015). Responses are based on an 11-point scale, with values ranging from 0 (cannot do it all) to 10 (most often can do). A full-scale score will be computed for statistical analysis. Full-scale scores for the CSES range from 0 to 260 with low scores indicating low self-esteem efficacy and high scores indicating high self-esteem efficacy. The CSES was utilized for this study because the instrument has shown to be reliable and consistent in previous studies and will adequately measure the variable of coping for participants in this study.

The Everyday Discrimination Scale

This is a nine-item index that measures the perceptions of day-to-day racial discrimination (Williams et al., 1997)The EDS uses a 6-point Likert scale ranging from (1-Almost everyday to 6-Nevet) . The EDS scale was used for adolescents aged 13–17 (Williams et al., 1997), and the revised version (revised-EDS) was used for adults aged 18 years and older (Stucky et al., 2011).

Williams et al. (1997) conducted a study using the EDS to assess attitude, racial discrimination, and the social perceptions of Black adolescent students between grades 9

through 12. The alpha reliability coefficient from the sample was .87, with correlations ranging from .50 to .70 with a mean = .61 and split-half reliability of .83 (Williams et al., 1997). The study's validity accounted for 49% of the standardized variance, and the correlation analyses of EDS indicated a scale score that was significantly related to internalizing and externalizing symptoms (Williams et al., 1997).

Stucky et al. (2011) conducted a study to cross-validate the psychometric properties of the EDS, using a 6-point Likert scale, five-item questionnaire. The response options were 0 (*never*), 1 (*less than once a year*), 2 (*a few times a year*), 3 (*a few times a month*), 4 (*at least once a week*), and 5 (*almost every day*). The validity of the study showed consistency with previous studies, with high levels of everyday discrimination were significantly associated with depression as measured by a screening tool with results (r = .24 and .25, p < .001, respectively) and depression r = .33 and .34, p < .001, respectively (Stucky et al., 2011). Data analysis for the everyday discrimination scale will be conducted by computing full-scale scores. The full-scale score for the everyday discrimination scale runs from 0 to 45, with a low score indicating low experiences of lifetime discrimination and a high score indicating high experiences of lifetime discrimination. For this study, the item was used as is because it was developed to also measure race and ethnicity amongst others.

Hypotheses

The research question and hypotheses for this study were

RQ: What is the contribution of Acculturation, Gender, SES, Coping Self-efficacy, and Perceived Discrimination to the statistical variance in Depression Among Nigerian Immigrants in the United States?

H_0: Acculturation, SES, gender, coping style, and perceived discrimination will not correlate with depression among Nigerian immigrants living in the United States.

H_1: Acculturation to the United States culture, as measured by the VIA scale, will be negatively correlated with depression as measured by the PHQ-9.

H_2: SES, as measured by the sociodemographic survey, will be negatively correlated with depression, as measured by the PHQ-9.

H_3: Perceived discrimination, as measured by the EDS, will be positively correlated with depression as measured by the PHQ-9.

H_4: Coping self-efficacy, as measured by the CSES, will be negatively associated with depression as measured by the PHQ-9.

H_5: Men will score higher than women on depression, as measured by the PHQ-9.

Data Analysis Plan

Participants completed surveys online via the SurveyMonkey platform and in person via a controlled location. After the required number of participants was obtained, I cleaned the data and exported it to SPSS for analysis. The data were analyzed for missing values, which were replaced using the expectation-maximization (EM) imputation algorithm available through SPSS Missing Value Analysis. Descriptive statistics were conducted to assess for values outside acceptable scoring parameters, and inversely

worded items were recoded accordingly. Full-scale scores for each instrument were computed by summing the relevant items and creating new variables. Internal reliability for each scale was also calculated. To test the study's hypotheses, I performed standard/simultaneous linear multiple regression analysis. In addition, descriptive statistics and bivariate correlations were conducted to examine relationships among the variables. The multiple regression analysis assessed the amount of variance in the criterion variable (depression) that was predicted by gender, acculturation, SES, coping style, and perceived discrimination, as measured by the instruments used in the study. The alpha level for all statistical analyses was set at 5% ($p < 0.05$).

Threats to Validity

Validity refers to the accuracy of how a method measures what it is intended to measure. According to Zeller and Carmines (1979), "validity is a matter of degree, not an all or none property" (p. 13). Validity can be internal or external. Internal validity usually means the certainty of a result can be attributed to the manipulation of the independent variable. In contrast, external validity is the ability to apply research findings to other situations in the real world and among different groups or settings.

Threats to Internal Validity

In a research study, threats against internal validity could arise. Internal validity refers to the degree inferences can be made about the causal relationship between variables (Cozby & Bates, 2015). As a correlational survey study, issues of internal validity are less relevant than in the case of experimental research designs. Nonetheless, several relevant issues are identified. The internal validity threats in this study included

selection and mortality. Participants differed on characteristics such as age, gender, SES, and immigration status. However, all participants were Nigerian immigrants living in the United States. A lengthy survey can often lead to participant fatigue, inability to complete the survey, loss of interest, or distraction (e.g., hunger), all of which may negatively impact the quality and completeness of the data. To mitigate the risk of participant dropout, the researcher recruited a larger sample than initially estimated by G*Power to offset the effects of mortality.

Threats to External Validity

External validity refers to "the degree to which the results of an experiment can be generalized" (Cozby & Bates, 2015, p. 397). The use of a convenience sample may limit the generalizability of the study. Thus, although the study focused on Nigerian immigrants in the United States, inferences about the generalizability of the study's results to the general population of Nigerian immigrants living in the United States was cautiously made.

Ethical Procedures

Research proposals must abide by ethical guidelines, undergo review, and approval before conduction. According to the American Psychological Association (2010), "when institutional approval is required, psychologists provide accurate information about their research proposals and obtain approval prior to conducting the research" (p. 26). Walden University's Institutional Review Board (IRB) will evaluate the proposal to ensure ethical conduct is met. A violation of this process can cause IRB to reject my proposal.

As a researcher, it is vital to take precautions when using human participants as subjects not to be exposed to harm. Prospective participants were provided with a consent form that outlined the full nature of the research prior to participation, allowing them the option to opt in or out voluntarily. The researcher's contact information, along with the university's contact details, was made available to each participant in case of questions, emergencies, or the need for support before, during, or after participation in the survey. The study was conducted anonymously, and no identifying information relating to participants was collected. All study data and materials were restricted to the lead researcher and the dissertation committee members. In accordance with Walden University's guidelines, all study materials, including data and related documentation, will be retained for 5 years and then destroyed securely to ensure participant confidentiality and data integrity.

Summary

The purpose of this quantitative, cross-sectional correlational survey design was to investigate whether several factors predicted depression among Nigerian immigrants living in the United States. More specifically, the study assessed whether gender, level of acculturation, SES, coping styles, and perceived discrimination predicted depressive symptomatology within this population. Berry's acculturation theory served as the theoretical foundation for the study. Participants were recruited through SurveyMonkey, an online data collection tool, with recruitment targeting Nigerian immigrants residing in the United States. Data were entered and analyzed using SPSS. The main hypothesis was tested using a standard (simultaneous) multiple regression analysis, with acculturation,

coping style, SES, gender, and perceived discrimination entered as predictor variables to determine their contribution to the variance in depression.

All surveys used in the study were completed via self-report and implemented Likert-type scales. The instruments utilized included a sociodemographic survey developed for this study, the Measurement of Acculturation Strategies for People of African Descent, PHQ-9, CSES, and the EDS (see Appendices B–F). Measures were taken to protect participants' privacy through adherence to ethical research practices in line with the American Psychological Association and Walden University's Institutional Review Board (IRB) guidelines. IRB approval, informed consent, and compliance with ethical standards were obtained and upheld throughout the research process. The results of the study were presented in Chapter 4. This chapter included a detailed quantitative and statistical analysis report of both the significant and nonsignificant findings derived from the study.

Chapter 4: Results

Introduction

This quantitative study focused on the predictors of depressive symptomatology among Nigerian immigrants living in the United States. The population selected for this study were first and second-generation adult Nigerian immigrants to the United States. I assessed gender, level of acculturation, SES, coping styles, and perceived discrimination. The following hypothesis were proposed for the study:

H_0: Acculturation, SES, gender, coping style, and perceived discrimination will not correlate with depression among Nigerian immigrants living in the United States.

H_1: Acculturation to the United States culture, as measured by the VIA scale, will be negatively correlated with depression as measured by the PHQ-9.

H_2: SES, as measured by the sociodemographic survey, will be negatively correlated with depression, as measured by the PHQ-9.

H_3: Perceived discrimination, as measured by the EDS, will be positively correlated with depression as measured by the PHQ-9.

H_4: Coping self-efficacy, as measured by the CSES, will be negatively associated with depression as measured by the PHQ-9.

H_5: Men will score higher than women on depression, as measured by the PHQ-9.

Data Collection

The following issues associated with data collection is presented in this section: (a) data collection time frame, response rate, missing data, and other discrepancies, (b) demographic of samples, (c) analysis of samples, (d) univariate analysis results.

Time Frame, Response Rates, and Discrepancies

After Walden University's IRB approval (approval no. 07-19-23-0593793), data collection began immediately. A flyer was created for recruitment, sociodemographic survey was used to gather basic information of participants, VIA scale, PHQ-9, CSES, and the EDS were created and housed in the Survey Monkey website for online access to participants. The created Flyers were electronically shared on Facebook, Instagram, and other social media outlets by using various association such as The Nigerian American Professionals Association, and Nigerian Americans community board. Online recruitment of participants took place between (August 2023 to June 2024)). A total of 59 participants were recruited online.

Prompted by challenges in the online recruitment of participants, approval was requested and granted by the IRB for a paper version of the surveys. After IRB's approval, A church in New York city was selected for this study. The process employed in gathering participants from the selected church required the pastor to announce the survey to the church members during service, interested participants will pick up the Papers (Consent and Survey) at the pastor's office and return the survey when complete. The pastor handled the pick-up and drop off anonymously. Candidates interested would pick up the survey from the pastor's office; and drop it off in a locked box at the pastor's

office when completed. Paper and pencil data collection began in April 2024 and was completed in May 2024.

A total of 124 individuals participated in the study of which 59 participants were recruited online, and 55 completed the paper version. Thirteen cases were removed as these have large number of missing items, thus now resulting in a total of 111 cases, 57 of which were online participants and 54 paper participants. This number was lower than the minimum size needed as calculated by the G* Power software of 138 participants.

Demographic Characteristics of the Sample

Of the 111 participants, 47 (42.3%) were men and 54 (57.7%) were women. The mean age was 34.56 years (*SD* = 12.14). Out of the 111 participants, 79 participants (71.2%) were born in Nigeria, (27.9%) were born in the United States, while (0.9%) recorded their birthplace as other. With regard to years lived in the United States, the mean number of years was 17.19 (*M* = 17.19, *SD* = 12.364). With regards to ethnicity, 67 participants (60.4%) consider themselves African American, while 43 participants (38.7%) identify as non-African American, and 1 participant (0.9%) did not respond, resulting in a missing value. Almost half of the participants (*n* = 55; 49.5%) identified as nonimmigrants, with 54 (48.6%) immigrants and 2 (1.8%) missing value.

Fifty-seven (*n* = 57; 51.4) participants reported not having at least 1 Nigerian parent, while 54 (*n* = 54; 48.6%) participants reported having at least one Nigerian parent. With regards to English language fluency, 100 (*n* = 100; 90.1%) participants responded that they could speak the English language very well, 9 (*n* = 9; 8.1%) participants responded that they could speak the English language well, and 2 (*n* = 2;

1.8%) participants did not respond to the question resulting in missing values. With regard to culture, 70 (*n* = 70; 63.1%) participants completely considered themselves a Nigerian cultured person, 30 (*n* = 30: 27%) participants considered themselves a Nigerian cultured person but not totally, 6 (*n* = 6; 5.4%) participants disagreed to be considered a Nigerian cultured person, and 5 (*n* = 5; 4.5%) participants completely refused to be considered a Nigerian cultured person. Regarding spirituality, 58 respondents (52.3%) completely agreed with being spiritual, 35 correspondents (31.5%) agreed to being spiritual, 10 correspondents (9%) disagreed with being considered spiritual, and 7 correspondents (6.3%) completely disagreed to be considered spiritual. Regarding the Nigerian ethnic group, more than half of the participants (*n* = 81; 73%) identified as Yoruba; 28 participants (*n* = 28; 25.2%) identified as Igbo; 1 participant (*n* = 1;0.9) identified to be Hausa, and 1 participant (*n* = 1; 0.9%) identified as other.

Regarding education, 33 respondents (*n* = 33; 29.7%) reported having their PhD degree, 18 respondents (*n* = 18; 16.2%) reported having a master's degree, 23 respondents (*n* = 23; 20.7%) reported having a bachelor's degree, 13 respondents (*n* = 13; 11.7%) reported having an associate's degree, another 13 respondents (*n* = 13; 11.7%) reported having other degrees, 7 respondents (*n* = 7; 6.3%) reported to have a high school or similar equivalent degree, and 2 respondents (*n* = 2; 1.8%) did not provide a response to the question resulting in missing values. Regarding household income, 19 (17.1%) reported between $40k-$60k, another 19 (17.1%) reported between $60k - $80k, coincidentally, another 19 (17.1%) reported between $80k - $100k; 17 (15.3%) participants reported their income to be between $20k - $40k. 15 (13.5%) participants

reported making less than $20k. The top two groups who reported making the highest income are 9 (8.1%) participants making between $100k - $120k, and 9 (8.1%) participants reported to be making more than $140k, respectively. There were 4 (3.6%) missing value found which was due to four participants unanswered questions.

Representativeness of the Sample

Nigerian immigrants are among the fastest growing immigrant populations in the United States (Ekwemalor & Ezeobele, 2020), Unfortunately, there is very little information on the mental health needs of this vulnerable population (Ekwemalor et al., 2019). According to the U.S. Census Bureau (2014), a rough estimate of 221,075 out of 1,581,970 African immigrants living in the United States between 2008 and 2012 are Nigerian immigrants, making the target population one of the fastest growing African population in the United States. The Department of Homeland Security (2020) also reported Nigerian-born immigrants as the largest African immigrant group, with 12,398 people obtaining lawful permanent resident status in the United States and over 100,000 between 2011 and 2020. Though there is limited literature evidence supporting the Nigerian immigrant population, previous studies have shown how other countries and cultures acculturate in the United States; for example, (Zhang & King, 2022) argued that low income affects the acculturation process. Zhang and King (2022) argued that acculturation at the individual level and the parent-adolescent acculturation gap at the family level influence the psychological adjustment of Chinese immigrant parents in a low-income society.

Results

In this section, results based on the study's hypotheses are reported. The main statistical analysis run for testing hypotheses were bivariate correlations and multiple regression. However, I started by reporting internal reliability coefficients for all key instruments used in the statistical analyses.

Instrument Reliability

Cronbach's alpha coefficients were computed for all scales in the study. The VIA scale measuring acculturation to Nigerian culture yielded a .94 alpha (n = 108), while the one assessing adherence to American culture resulted in a .93 alpha (n = 111). The PHQ, which measured depression, yielded a Cronbach's alpha of .88 (n = 110). The CSES yielded a .98 alpha (n = 111). Finally, the EDS (discrimination) resulted in an alpha of .97 (n = 109). Overall, the reliability obtained for the instruments was high, and thus adequate for testing the study's hypotheses.

Bivariate Correlations

Bivariate correlations were computed for all variables included in the study's hypotheses: gender, SES, acculturation, coping, discrimination, and depression. Results are reported in Table 1.

Table 1

Bivariate Correlations Among Variables

Variable	1	2	3	4	5	6
1. Gender	--					
2. SES	-.11	--				
3. Acculturation	.12	-.01	--			
4. Coping	-.07	-.04	.22**	--		
5. Discrimination	-.16*	.12	-.08	-.24**	--	
6. Depression	.12	-.02	-.02	-.54**	.20*	--

Note. SES = socioeconomic status.

*$p < .05$. **$p < .01$.

Five bivariate correlations were found statistically significant. Gender was negatively associated with discrimination. Because gender was coded as 0 = female and 1 = male, the negative association between gender and discrimination means that women were most likely to report being discriminated against as compared with men. Coping was negatively associated with acculturation, thus indicating that Nigerian immigrants reporting a higher degree of acculturation to the American culture also report better coping. Coping was also negatively correlated with discrimination and depression. This means that those Nigerian immigrants reporting higher coping skills also report lower scores on their perception of being discriminated and on feelings of depression. Finally,

discrimination was positively associated with depression, thus indicating those participants reporting higher discrimination also report higher levels of depression.

Multiple Regression Analysis

A standard linear multiple regression analysis was performed to assess the statistical contribution of gender, SES, acculturation, coping, and discrimination to the variance in depression scores. Results of the regression analysis and reported in Table 2.

Table 2

Multiple Regression Analysis for Variables Predicting Depression

Variable	*B*	*SE B*	β	*t*	*p*
Gender	.74	.67	.10	1.11	.27
SES	-.08	.16	-.04	-.49	.63
Acculturation	.04	.04	.09	1.04	.30
Coping	-.08	.01	-.53	-6.13	.00
Discrimination	.03	.02	.10	1.11	.27

Note. SES = socioeconomic status.

Summarizing results from the multiple regression analysis, only coping contributed to the prediction of depression scores. The Beta value was quite high, thus highlighting the significance of coping style in the prediction of depression and possibly contributing to suppressing the value of other variables.

Summary

In this chapter, I presented the statistical analysis results of the survey responses of 111 participants. The presented data showed a diverse sample of participants in regard to gender, age, place of birth, education, English language proficiency, spirituality, religion, income, birth of parents, and years lived in the United States. A standard linear multiple regression analysis was performed to test the hypothesis of gender, SES, acculturation, coping, and perceived discrimination as predictors of depression among Nigerian immigrants living in the United States. Coping was the only variable with a statistically significant beta. Bivariate correlations were also done to test the association between other variables and depression and acculturation. Five bivariate correlations were found statistically significant.

The key results from this study are discussed in Chapter 5. The discussion of the results from the study includes implications for Berry's acculturation model as a framework to understanding acculturation as a predictor of depression among Nigerian immigrants living in the United States. Chapter 5 also presents the implications for providers practicing in the mental health and welfare field in regard to working with the Nigerian immigrant population living in the United States.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The main purpose of this study was to identify predictors of depression among Nigerian immigrants living in the United States. Bivariate correlational analyses identified coping and discrimination as the only variables predicting depression. Coping was negatively associated with depression, while discrimination was positively associated with depression. A standard linear multiple regression analysis was used to examine if gender, SES, acculturation, coping style, and perceived discrimination as predictors of depression among Nigerian immigrants living in the United States. Only coping was found to be a statistically significant predictor of depression.

This chapter includes the interpretation and discussion of the results. It addresses the implication of Berry's acculturation model as the framework of this study based on the results. The contribution of this study's findings to our understanding of the experience of Nigerian immigrants are discussed with aims at assisting clinicians in better serving this populations. Finally, the limitations of the study are discussed as well as future directions for studies on predictors of depression among Nigerian immigrants are presented.

Interpretation of the Findings

The discussion of the study's findings is organized based on the hypotheses. Each proposed predictor is discussed as related to its proposed relationship with depression and the actual study's findings. These findings are analyzed by comparing existing literature as well as the potential contribution to Berry's acculturation theory.

Acculturation

Acculturation is defined as "the process by which individuals change both by being influenced by contact with another culture and by being participants in the general acculturative changes underway in their own culture" (Berry, 1990, pp. 234–235). In this study, acculturation was proposed as a predictor of depression. More specifically, it was hypothesized that Nigerian immigrants with a higher degree of acculturation to the American culture would report less depression as compared with Nigerian immigrants with lower levels of acculturation.

A bivariate analysis was conducted to determine the correlation between acculturation and depression. The results failed to show a statistically significant negative relation. Thus, the null hypothesis is accepted. This suggest that there is not a relationship between acculturation and depression among Nigerian immigrants. A standard linear multiple regression analysis was performed to assess the statistical contribution of acculturation and other variables and their relationships to depression. The results show that acculturation did not predict changes in the variance of depression. These results are thus consistent with the bivariate analyses and support the acceptance of the null hypothesis. Interestingly, acculturation was positively associated with coping self-efficacy. This means that as participants reported higher levels of acculturation to the U.S. culture, they also reported higher levels of coping self-efficacy.

The empirical literature on the relationship between acculturation and depression is inconclusive as there are a lot of contradictory findings. The present study’s results on the relationship between acculturation and depression are consistent with some studies

but inconsistent with others. For example, Gonidakis et al. (2011) stated that acculturation has been linked to stress-related psychological disorders such as depression. Ikonte et al. (2020) confirmed that the prevalence of depression is lower in immigrants than in U.S.-born individuals but increases among immigrants over time, surpassing that of U.S.-born citizens. That study also shows the negative correlation between acculturation and depression. A meta-analysis on depression and acculturation among Latin American immigrants in the United States concluded there is not a relationship (Bridges et al., 2021). However, a meta-analysis on Asian Americans reported a small but statistically significant positive association (Gupta et al., 2013). Although it is commonly assumed that acculturation to the U.S. culture among Nigerian immigrants is likely to protect against depression, other possibilities need to be explored. For example, it is possible that the longer that immigrants stay in the United States the higher their exposure to discrimination.

One possible explanation for the lack of a relationship between acculturation and depression in the current study relates to the lack of variability in acculturation in our sample. While the upper score on American acculturation on the scale was 50, the mean for the sample was 36. This means that overall, participants in this study were highly acculturated. This is further supported by the average number of years participants lived in the United States. The mean number of years lived in the United States for participants in this study was 17. That is a high number. It seems plausible, then, that the lack of variability in acculturation in the sample made it challenging to more appropriately assess the relationship between acculturation and depression in this study.

While acculturation has been associated with both positive and negative mental health outcomes in prior research, it appears to have no meaningful effect on depression in this sample of Nigerian immigrants. This study shows that Nigerian immigrants may exhibit bicultural competence, maintaining strong ties to their native cultural identity while also engaging with aspects of American culture so therefore, this integrative acculturation style rather than full assimilation or marginalization may protect mental health by providing cultural continuity and adaptability to the Nigerian immigrant living in the United States.

Socioeconomic Status

In this study, SES was proposed as a predictor of depression. It was hypothesized that Nigerian immigrants with poor SES would report higher levels of depression as compared with Nigerian immigrants with higher SES. Findings from the bivariate correlation analyses show no correlation between SES and depression. SES did not correlate with any of the study's variable. A standard linear multiple regression analysis was also performed to assess the statistical contribution of SES and other variables to the variance of depression. The results showed SES did not contribute to the variance of depression.

One possible explanation for SES's lack of significance is the presence of coping in the regression model. Coping had a strong, statistically significant, and negative association with depression. It is possible that coping mediates or moderates the relationship between SES and depression. Individuals from lower SES backgrounds who possess strong coping mechanisms may be less vulnerable to depression, while those with

higher SES but poor coping may still experience high psychological distress. Thus, coping may "buffer" or absorb the impact of SES, rendering SES nonsignificant in the regression model. This suggests that psychological resources for Nigerian immigrants living in the United States may be more influential than economic ones in determining depression outcomes because coping after immigrating is more influential in determining depression outcomes than other variables used in this study. In the case of the study's sample, income was not a relevant factor in predicting depression. It is possible that individual difference variables may be more relevant in understanding depression among Nigerian immigrants in the United States. Attention to other psychological variables, in the same line as coping, should be provided for future studies. In addition, the current study measure SES based solely on self-reported income. Other contributing factors to SES, such as educational attainment could have provided a more thorough operationalization of the construct.

SES is a critical determinant of well-being, influential access to resources, social opportunities, and the overall quality of life (Spires et al., 2020). Marmot et al., (2019) stated that income is often considered a primary aspect of SES, as it dictates an individual's ability to access essential goods and services, including housing, health care, and education. Studies have shown that the probability of being in the poorest health profile type group was progressively higher as social class declined (Starfield et al., 2002). Findings suggest an association between low family income and young people's depressive symptom trajectories in the United States. This is consistent with the relationship between greater income inequality and worse child and adolescent outcomes

(Minh et al., 2021). SES has been shown to be strongly correlated to depression among late-life immigrants (Guo et al., 2019). Immigrants from low-income backgrounds often experience multiple stressors, including economic hardship, social isolation, and discrimination, all of which contribute to heightened vulnerability to depression. Becerra et al. (2020) conducted a study to understand the health disparities among the immigrant population in the United States; the study found that immigrants living in poverty or low-income conditions often report high levels of psychological distress, which can manifest as depression.

Perceived Discrimination

Perceived discrimination has been defined as an individual's subjective interpretation of being treated unfairly, or unequally based on characteristics such as race, ethnicity, gender, or immigration status, even with no clear evidence or formal recognition of such bias (Pascoe & Smart Richman, 2009). In the United States, perceived discrimination is a significant issue that affects the social, psychological, and economic well-being of immigrants living in the United States. Many immigrants, especially those from marginalized or minority communities, report experiencing discrimination in various forms, including racism, xenophobia, and exclusion based on nationality, ethnicity, or immigration status. According to Schultz et al. (2008), perceived discrimination has been shown to affect both mental and physical health outcomes of immigrants living in the United States. Bals et al. (2018) further explained that perceived discrimination can be particularly pervasive, as it may intersect with factors like

immigration status, accent, or foreign appearance, further complicating their experience in a new cultural environment.

In this study, perceived discrimination was proposed as a predictor of depression among Nigerian immigrants living in the United States. It was hypothesized that Nigerian immigrants with higher perceived discrimination experience would report a higher level of depression as compared to participants with a lower level of perceived discrimination. In the current study, a bivariate correlation and a multiple regression analysis were performed to test the hypothesis that perceived discrimination would be positively correlated with depression. The results of the bivariate correlation confirmed the hypothesis. However, perceived discrimination did not contribute to the variance in depression scores in the multiple regression analysis. Only coping self-efficacy contributed to the prediction of depression. The Beta value of coping self-efficacy was quite high, thus highlighting the significance of coping in the prediction of depression and possibly contributing to suppressing the value of other variables such as perceived discrimination. Perceived discrimination correlated with coping self-efficacy which in turn correlated with depression. Thus, although discrimination is a well-documented stressor, its predictive power was only partially supported in this study. It is possible that coping mechanisms mediate this relationship, reducing the direct impact of discrimination on depression. Although the perception of discrimination is likely relevant, it is not as significant as how immigrants cope with these instances of group-based aggression. It is possible that other variables not included in this study mediate the relationship between perceived discrimination and depression.

It is also possible that gender differences may have influenced lack of significant results in the multiple regression analysis. Nigerian men in this study reported a higher level of perceived discrimination as compared with women. In traditional Nigerian culture, women are often assigned roles that emphasize submission, domestic responsibility, and deference to male authority (Jaiyeola, 2020). These cultural expectations contribute to gendered experiences of discrimination, especially in contexts where women's access to decision-making, education, and economic power is limited. However, when Nigerian immigrants relocate to Western societies such as the United States, they are often exposed to cultural values that support gender equality and individual empowerment, particularly for women. This exposure may lead to a "role reversal" where Nigerian women gain more autonomy and social voice, while men may feel displaced from their traditional leadership roles. Such transitions can intensify gender tensions or lead to renegotiation of familial power structures. The shift from patriarchal Nigerian norms to American egalitarian frameworks frequently results in reshaped gender identities, transforming how both men and women perceive and report their experiences with discrimination and social status (Abolade et al., 2023). It is not possible to state that this is the primary reason for men reporting more discrimination than women. However, cultural shock after migrating to the United States could play a crucial role in the experiences of immigrants with poor acculturation strategies and coping skills.

Gender

In this study, gender was proposed as a predictor of depression among Nigerian immigrants living in the United States. This analysis focuses on the relationship between

gender and depression among Nigerian immigrants in the United States, based on findings from both bivariate correlation and multiple regression analysis. The bivariate correlation analysis showed the relationship between gender and depression was not statistically significant. Multiple regression analysis confirmed the same result. This result is somewhat inconsistent with global mental health literature, which typically finds higher depression rates among women. The lack of statistical significance in this sample suggests that gender-based disparities in depression may not follow universal patterns among Nigerian immigrants living in the United States because they are a population shaped by unique cultural, religious, and socioeconomic dynamics. It is possible that women in the present sample are more resourceful than those in other studies as recent studies indicated that immigrant women often draw upon cultural strengths, enhanced resilience, and adaptive coping mechanisms to navigate the stressors associated with migration (Garcini et al., 2022). These factors can be used to explain why women from this study reported relatively lower levels of depression compared to global trends from other studies. For Nigerian immigrant women, maintaining strong communal ties, religious involvement, and a focus on education and financial independence may serve as their protective factors against depression and other mental illness. Also, the exposure to American cultural values promoting gender equity and empowerment may further bolster psychological resilience. Women who successfully adapt to new social structures and challenges are likely to perceive themselves as agents of change, thereby mitigating the effects of traditional gendered expectations. According to Garcini et al. (2022), immigrant women who access cultural pride and ancestral resilience report better mental

health outcomes despite systemic barriers. In this sample, women's reported depression levels may reflect not a lack of distress but rather a testament to their capacity for resourcefulness and emotional endurance in the face of significant transition and acculturation stress.

Global epidemiological studies consistently report that women are more likely to experience and report higher levels of depression than men, a disparity often explained through gender role socialization, exposure to chronic stress, and differences in emotional expression and help-seeking behavior (Zhou & Xi, 2024). Women may internalize distress more readily, are more likely to seek psychological help, and often face stressors such as gender-based discrimination, caregiving responsibilities, and social expectations that amplify emotional strain. In contrast, traditional masculine norms often discourage men from expressing vulnerability, leading to underreporting and internal suppression of depressive symptoms (Cole & Ingram, 2020). These psychosocial and cultural dynamics are key to understanding why gender differences in depression appear across diverse populations. However, in immigrant populations, gender effects on depression may be significantly shaped by a variety of sociocultural and environmental factors, including cultural background, level of acculturation, internalized gender norms, and the unique stressors of migration (Morawa et al., 2020). These factors often interact in complex ways to determine how depression is experienced and reported by men and women. For example, women may be more susceptible to emotional stress due to gender-based discrimination or caregiving responsibilities, while men may underreport depressive symptoms because of cultural expectations of strength and stoicism. As Morawa et al.

(2020) explain in their study on Turkish migrants in Germany, acculturation-related stressors and traditional gender roles can significantly shape mental health outcomes, with variations observed across both gender and generational lines. These findings underscore the importance of contextualizing gender within the immigrant experience when interpreting depression-related data.

Limitations of the Study

Although the findings of this study provide valuable insights into the predictors of depression among Nigerian immigrants in the United States, several limitations must be acknowledged. The sample size used for this study may limit the generalizability of the findings. Although the results are indicative of trends within the sampled population, they may not fully represent the broader Nigerian immigrant community across different regions in the United States. Variations in SES, acculturation experiences, and regional support networks could affect depression rates and coping strategies, suggesting that larger, more diverse samples are necessary for broader inferences. I employed a cross-sectional design, which restricts its ability to establish causal relationships between variables. Although correlations were identified, it is not possible to determine whether gender, coping, SES, acculturation, or discrimination cause changes in depression levels. Longitudinal studies would be needed to examine how these factors evolve and impact mental health over time.

Another limitation is the collection of data. Data were collected through self-report measures, which are inherently subject to biases such as social desirability and recall inaccuracy. Participants may have underreported symptoms of depression due to

cultural stigmatization of mental health issues, particularly among men, who may feel pressure to conform to traditional norms of strength and resilience.

While the study examined gender, SES, coping, acculturation, and discrimination, it did not delve deeply into cultural nuances specific to sub-ethnic groups within the Nigerian population. Nigeria is culturally diverse, with differences in gender expectations, mental health perceptions, and community support that could influence depression outcomes. I used general measures for acculturation and perceived discrimination, which may not capture the full complexity of these experiences. Acculturation, for example, is multidimensional and may involve linguistic adaptation, social integration, and cultural identity negotiation. More granular measures would provide a richer understanding of how these factors intersect with mental health.

I coded gender as a binary variable (male = 1, female = 0), which may oversimplify gender experiences. This approach does not account for nonbinary or gender-fluid identities, potentially limiting the understanding of gender-based disparities in mental health among Nigerian immigrants. The absence of longitudinal tracking prevents analysis of changes in depression levels over time as immigrants navigate acculturation, socioeconomic adjustments, and family dynamics. Tracking participants across years would enable a more comprehensive view of mental health trajectories in response to shifting circumstances.

Recommendations

Future researchers should include a larger and more diverse sample of Nigerian immigrants, covering multiple U.S. states and accounting for regional differences in

acculturation, community support, and access to mental health resources. Increasing sample diversity would improve the generalizability of findings and provide more granular insights into how gender, SES, and coping mechanisms affect depression across different communities. Also, to better understand the causal relationships between gender, acculturation, discrimination, coping, and depression; future studies should employ longitudinal designs. Tracking participants over time would allow researchers to observe changes in mental health outcomes as immigrants adapt to life in the United States, adjust to socioeconomic challenges, and navigate evolving gender roles.

Another recommendation is combining quantitative surveys with qualitative interviews, which would provide a richer understanding of how Nigerian immigrants experience help interpret and navigate through mental health challenges. Qualitative narratives could uncover cultural barriers to seeking help, gender-based expectations, and the impact of community support in ways that purely statistical analysis may not capture. Future researchers should also consider multidimensional measures of acculturation that go beyond simple language adaptation or surface-level integration. Concepts such as cultural identity, ethnic pride, and bicultural competence should be assessed to better understand their impact on depression. Similarly, discrimination measures should be tailored to capture both overt and subtle forms of bias that Nigerian immigrants may encounter.

I used a binary measure of gender, potentially overlooking the experiences of nonbinary and gender-fluid individuals. Future research should include broader gender identification options and examine how gender intersects with ethnicity, SES, and

migration status to influence mental health. Future researchers should also focus on the cultural coping mechanisms specific to Nigerian immigrants, such as faith-based practices, community gatherings, and traditional support systems. Understanding how these culturally grounded strategies buffer against mental health challenges could offer important insights for community-based interventions. Researchers should also explore how targeted interventions can address mental health disparities among Nigerian immigrants. Community-based programs that strengthen coping skills, reduce stigma around mental health, and promote accessible mental health services could be pivotal in addressing the unique challenges faced by this population.

Implications

The findings of this study hold significant implications for mental health practitioners, community organizations, policymakers, and future research focused on Nigerian immigrants in the United States. By examining the predictors of depression, specifically, gender, SES, coping, acculturation, and perceived discrimination, this study highlights critical areas for intervention and policy development, such as mental health interventions, community-based support networks, policy implications, research implications or limitations, and global relevance and cross-cultural understanding of the Nigerian immigrant population

Mental Health Interventions

The study's findings underscore the importance of targeted mental health interventions that address the unique challenges faced by Nigerian immigrants. The significant role of coping in reducing depression levels suggests that interventions aimed

at enhancing adaptive coping strategies could be particularly effective. Programs focusing on stress management, resilience training, and community-based support can help individuals navigate the psychological pressures associated with migration and acculturation. Moreover, the finding that men reported slightly higher depression levels than women, although not statistically significant, points to a potential need for gender-sensitive support services. Traditional cultural norms may discourage men from seeking mental health care, reinforcing the need for culturally tailored outreach that addresses stigma and promotes help-seeking behaviors among men.

Community-Based Support Networks

The study highlights the protective effect of social and community support networks in mitigating depression. For Nigerian immigrants, faith-based organizations, community centers, and ethnic associations serve as vital sources of psychological and emotional support. Strengthening these community infrastructures could enhance collective resilience and provide safe spaces for addressing mental health challenges. Community programs that promote dialogue around mental health, particularly within religious and cultural groups, could help destigmatize depression and encourage earlier intervention. Such initiatives can be pivotal in enhancing mental health literacy and reducing cultural barriers to accessing services.

Policy Implications

Policy initiatives should prioritize mental health accessibility and cultural competency in service delivery. Given the central role of acculturation and coping in mental health outcomes, policies should support programs like culturally adapted

counseling services that reflect the unique experiences of Nigerian immigrants, Multilingual mental health services to address language barriers, and outreach programs in immigrant-dense communities to increase awareness of available mental health resources. Furthermore, addressing discrimination and socioeconomic challenges through community outreach and legal protections can improve overall mental well-being in Nigerian immigrant populations.

Research Implications

The study's findings also have implications for future research. The observed gender differences in depression suggest that more nuanced exploration is needed, particularly regarding how cultural norms and masculinity expectations affect men's mental health. Additionally, the strong impact of coping mechanisms indicates that future research should explore culturally specific coping strategies, such as religious practices, communal support, and traditional healing, as buffers against mental distress. Longitudinal research could provide more robust evidence of causal relationships and track the evolution of mental health symptoms over time as immigrants integrate into American society. Mixed methods approach that include qualitative narratives would also offer deeper insights into how Nigerian immigrants experience and cope with depression in their daily lives.

Global Relevance and Cross-Cultural Understanding

The implications extend beyond Nigerian communities to other immigrant populations facing acculturation stress and cultural adaptation. Understanding the role of cultural identity, coping, and gender dynamics in mental health can inform global mental

health initiatives aimed at supporting immigrants in diverse contexts. Policies and programs that recognize cultural strengths while addressing systemic barriers can promote mental well-being across immigrant groups.

Conclusion

Research exploring the mental health needs of Nigerian immigrants in the United States remains limited, despite the growing presence of this population and their unique sociocultural challenges. This study contributes to closing that gap by examining the interconnected roles of gender, coping self-efficacy, acculturation, SES, and perceived discrimination in predicting depression among Nigerian immigrants living in the United States.

Guided by the hypothesis that these five variables would significantly predict depression, the study's findings revealed that coping self-efficacy was the only statistically significant predictor of depression in the multiple regression analyses. Gender, perceived discrimination, acculturation, and SES, while theoretically important, did not show significant direct effects in the multivariate model, suggesting that their influence may be indirect or contextually mediated by coping and other unmeasured cultural or psychological factors.

The results also highlighted subtle but important trends. For instance, men in the study reported slightly higher depression levels than women—an outcome that contrasts with global trends but may reflect migration-induced role strain, unmet expectations, and shifting gender dynamics within the host culture. These findings underscore the need to

contextualize mental health experiences within the cultural, religious, and gender norms specific to Nigerian immigrant communities.

Importantly, this study emphasizes the critical role of culturally relevant coping resources. Policymakers, clinicians, and community organizations must work collaboratively to reduce cultural stigma, build community-based support systems, and develop culturally tailored mental health interventions. These initiatives should prioritize resilience training, enhance access to services, and support faith-based and ethnic community organizations that serve as informal support networks for many immigrants. Future researchers should adopt longitudinal and mixed method designs to capture the evolving psychological experiences of Nigerian immigrants over time. Additionally, further exploration of cultural identity, bicultural integration, and communal coping mechanisms could yield deeper insight into protective factors that promote mental well-being in immigrant populations. In conclusion, while more work remains, this study offers a foundational framework for understanding the depression-related experiences of Nigerian immigrants and advocates for holistic, culturally sensitive approaches to the mental health of this population.

References

Agbemenu, K. (2016). Acculturation and health behaviors of African immigrants living in the United States: An integrative review. *ABNF Journal*, *27*(3), 67–73.

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

American Psychological Association. (n.d.). Depression. Retrieved August 15, 2021, from https://www.apa.org/topics/depression

American Psychological Association. (2012). Gender. In Bias-Free Language Guidelines. Retrieved [May 15, 2023], from https://apastyle.apa.org/style-grammar-guidelines/bias-free-language/gender

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.; DSM-IV-TR). American Psychiatric Publishing.

American Psychological Association. (2021). Socioeconomic status (SES). In APA Topics. Retrieved August, 2024, from https://www.apa.org/topics/socioeconomic-status

American Psychological Association. (2019, October 31). *Discrimination: What it is and how to cope*. Retrieved [June, 2023], from https://www.apa.org/topics/racism-bias-discrimination/types-stress

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

American Psychological Association. (2016, updated 2023). *Overcoming depression: How psychologists help with depressive disorders*. Retrieved August 15, 2025, from https://www.apa.org/topics/depression/overcoming

American Psychological Association. (2017). Ethical principles of psychologists and code of conduct. https://www.apa.org/ethics/code

Antolín-Suárez, L., Nieto-Casado, F. J., Rodríguez-Meirinhos, A., & Oliva, A. (2020). Demographic, social, and economic factors of internalizing problems in referred and non-referred adolescents. *International Journal of Environmental Research and Public Health*, *17*(14), Article 5195. https://doi.org/10.3390/ijerph17145195

Behrens, K., del Pozo, M. A., Großhennig, A., Sieberer, M., & Graef-Calliess, I. T. (2015). How much orientation towards the host culture is healthy? Acculturation style as risk enhancement for depressive symptoms in immigrants. *International Journal of Social Psychiatry*, *61*(5), 498–505. https://doi.org/10.1177/0020764014560356

Berry, J. W. (1990). Psychology of acculturation. In J. Berman (Ed.), *Nebraska Symposium on Motivation, 1989: Cross-cultural perspectives* (pp. 201–234). University of Nebraska Press.

Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations*, *29*(6), 697–712. https://doi.org/10.1016/j.ijintrel.2005.07.013

Bhugra, D., Watson, C., & Ventriglio, A. (2021). Migration, cultural capital, and acculturation. *International Review of Psychiatry*, *33*(1–2), 126–131.

https://doi.org/10.1080/09540261.2020.1733786

Bridges, A. J., Ledesma, R. J., Guzman, L. E., Berman, I. S., & Diaz Benitez, D. E. (2021). A systematic review and meta-analysis of the relation between acculturation and depression in Latinx adults. *Journal of Latinx Psychology*, *9*(3), 232–257. https://doi.org/10.1037/lat0000189

Brittian, A. S., Kim, S. Y., Armenta, B. E., Lee, R. M., Umaña-Taylor, A. J., Schwartz, S. J., Villalta, I. K., Zamboanga, B. L., Weisskirch, R. S., Juang, L. P., Castillo, L. G., & Hudson, M. L. (2015). Do dimensions of ethnic identity mediate the association between perceived ethnic group discrimination and depressive symptoms? *Cultural Diversity & Ethnic Minority Psychology*, *21*(1), 41–53. https://doi.org/10.1037/a0037531

Cameron, J. E., & Lalonde, R. N. (1994). *Self, ethnicity, and social group memberships in two generations of Italian Canadians. Personality and Social Psychology Bulletin, 20*(5), 514–520.

Chapagai, S., & Martyn-Nemeth, P (2022). Sleep health, acculturation, and acculturative stress in immigrants in the United States: A scoping review. *Journal of Transcultural Nursing*, *33*(3), 398–415. https://doi.org/10.1177/10436596211072884

Chesney, M. A., Neilands, T. B., Chambers, D. B., Taylor, J. M., & Folkman, S. (2006). *A validity and reliability study of the Coping Self-Efficacy Scale*. *British Journal of Health Psychology, 11*(Pt 3), 421–437. https://doi.org/10.1348/135910705X53155

Chesney, M., Folkman, S., Chambers, D., Tirpak, D. M., & Schlosser, L. Z. (2015). Coping Self-Efficacy Scale. *Journal of College Counseling, 18*(3), 255–267. https://doi.org/10.1002/jocc.12021

Chesney, M. A., & Folkman, S. (2016). *Coping Self-Efficacy Scale [Database record]*. PsycTESTS. https://doi.org/10.1037/t48891-000

Deng, Y.-T., Ou, Y.-N., Wu, B.-S., Yang, Y.-X., Jiang, Y., Huang, Y.-Y., Liu, Y., Tan, L., Dong, Q., Suckling, J., Li, F., & Yu, J.-T. (2022). Identifying causal genes for depression via integration of the proteome and transcriptome from brain and blood. *Molecular Psychiatry*, *27*(6), 2849–2857. https://doi.org/10.1038/s41380-022-01507-9

Driscoll, M. W., & Torres, L. (2022). Cultural adaptation profiles among Mexican-descent Latinxs: Acculturation, acculturative stress, and depression. *Cultural Diversity and Ethnic Minority Psychology*, *28*(2), 248–258. https://doi.org/10.1037/cdp0000503

Ekwemalor, C. C., & Ezeobele, I. E. (2020). Psychosocial Impacts of Immigration on Nigerian Immigrants in the United States: A Phenomenological Study. *Journal of Transcultural Nursing*, 31(3), 276–283. https://doi.org/10.1177/1043659619863087

Ekwemalor, C. C., Ogunbor, A., & Ezeobele, I. E. (2019). Depression and Perspectives of Nigerian Immigrant Men in the United States: An Applied Ethnographic Study. *Journal of Transcultural Nursing*, 30(1), 39–46. https://doi-org.ezp.waldenulibrary.org/10.1177/1043659618781707

Escamilla, S., & Saasa, S. (2020). Gendered patterns in depression and anxiety among African immigrants in the United States. *Journal of Evidence-Based Social Work*, 17(4), 392–405. https://doi-org.ezp.waldenulibrary.org/10.1080/26408066.2020.1748153

Ezeobele, I., Malecha, A., Landrum, P. and Symes, L. (2010), Depression and Nigerian-born immigrant women in the United States: a phenomenological study. *Journal of Psychiatric and Mental Health Nursing*, 17: 193-201. https://doi-org.ezp.waldenulibrary.org/10.1111/j.1365-2850.2009.01519.x

Firouzbakht, M., Rahmani, N., Sharif Nia, H., & Omidvar, S. (2022). Coping strategies and depression during the COVID-19 pandemic in pregnant women: A cross sectional study. *BMC Psychiatry*, *22*. https://doi.org/10.1186/s12888-022-03792-8

Gardner, L., Bunton, P., Edge, D., Wittkowski (2014) the experience of postnatal depression in West African mothers living in the United Kingdom: *A qualitative study*. https://doi.org/10.1016/j.midw.2013.08.001", http://www.sciencedirect.com/science/article/pii/S0266613813002258",

Gonidakis, F., Korakakis, P., Ploumpidis, D., Karapavlou, D.-A., Rogakou, E., & Madianos, M. G. (2011). The relationship between acculturation factors and symptoms of depression: A cross-sectional study with immigrants living in Athens. *Transcultural Psychiatry*, *48*(4), 437–454. https://doi.org/10.1177/1363461511408493

Hart, A. R., Lavner, J. A., Carter, S. E., & Beach, S. R. H. (2021). Racial discrimination, depressive symptoms, and sleep problems among Blacks in the rural South.

Cultural Diversity & Ethnic Minority Psychology, 27(1), 123–134. https://doi-org.ezp.waldenulibrary.org/10.1037/cdp0000365

Hudson, C. G. (2005). *Socioeconomic status and mental illness: Tests of the social causation and selection hypotheses*. *American Journal of Orthopsychiatry, 75*(1), 3–18. https://doi.org/10.1037/0002-9432.75.1.3

Ikonte, C. O., Prigmore, H. L., Dawson, A. Z., & Egede, L. E. (2020). Trends in prevalence of depression and serious psychological distress in United States immigrant and non-immigrant populations, 2010—2016. *Journal of Affective Disorders*, 274, 719–725. https://doi-org.ezp.waldenulibrary.org/10.1016/j.jad.2020.05.010

Klonoff, E. A., & Landrine, H. (2000). *Revising and Improving the African American Acculturation Scale*. *Journal of Black Psychology, 26*(2), 235–261. https://doi.org/10.1177/0095798400026002007

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (1999). Patient Health Questionnaire-9. *PsycTESTS*. https://doi.org/10.1037/t06165-000

Kumi-Yeboah, A., Brobbey, G., & Smith, P. (2020). Exploring Factors That Facilitate Acculturation Strategies and Academic Success of West African Immigrant Youth in Urban Schools. *Education and Urban Society*, 52(1), 21–50. https://doi-org.ezp.waldenulibrary.org/10.1177/0013124519846279

Lazarus, R., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, 1(3), 141-169. https://doi.org/10.1002/per.2410010304

Lincoln, K. D., & Chae, D. H. (2010). Stress, marital satisfaction, and psychological distress among African Americans. *Journal of Family Issues*, 31(8), 1081–1105. https://doi-org.ezp.waldenulibrary.org/10.1177/0192513X10365826

Madianos, M. G., Gonidakis, F., Ploubidis, D., Papadopoulou, E., & Rogakou, E. (2008). Measuring Acculturation and Symptoms of Depression of Foreign Immigrants in the Athens Area. *International Journal of Social Psychiat*ry, 54(4), 338–349. https://doi.org/10.1177/0020764008090288

Morneau-Vaillancourt, G., Coleman, J. R. I., Purves, K. L., Cheesman, R., Rayner, C., Breen, G., & Eley, T. C. (2020). The genetic and environmental hierarchical structure of anxiety and depression in the UK Biobank. *Depression and Anxiety*, *37*(6), 512–520. https://doi.org/10.1002/da.22991

National Institute of Mental Health. *Major Depression*. 2017. https://www.nimh.nih.gov/health/statistics/major-depression.shtml. Accessed January 2022.

Nedic Erjavec, G., Sagud, M., Nikolac Perkovic, M., Svob Strac, D., Konjevod, M., Tudor, L., Uzun, S., & Pivac, N. (2021). Depression: Biological markers and treatment. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, *105*. https://doi.org/10.1016/j.pnpbp.2020.110139

Nkimbeng, M., Nmezi, N. A., Baker, Z. G., Taylor, J. L., Commodore-Mensah, Y., Shippee, T. P., Szanton, S. L., & Gaugler, J. E. (2023). Depressive symptoms in older African immigrants with mobility limitations: A descriptive study. *Clinical Gerontologist: The Journal of Aging and Mental*

Health. https://doi.org/10.1080/07317115.2021.1976893

Onyigbuo, C. C., Alexis Garsee, C., & van den Akker, O. (2018). Adaptation of the Measurement of Acculturation Strategies for People of African Descent (MASPAD) in measuring Acculturation in British Nigerians. *Mental Health, Religion & Culture*, 21(9/10), 973–985. https://doi-org.ezp.waldenulibrary.org/10.1080/13674676.2018.1455650

Oppedal, B., Keles, S., Cheah, C., & Røysamb, E. (2020). Culture competence and mental health across different immigrant and refugee groups. *BMC Public Health*, 20(1), 292. https://doi-org.ezp.waldenulibrary.org/10.1186/s12889-020-8398-1

Oswald, T. M., Winder-Patel, B., Ruder, S., Xing, G., Stahmer, A., & Solomon, M. (2018). *A pilot randomized controlled trial of the ACCESS Program: A group intervention to improve social, adaptive functioning, stress coping, and self-determination outcomes in young adults with autism spectrum disorder*. Journal of Autism and Developmental Disorders, 48(5), 1742–1760. https://doi.org/10.1007/s10803-017-3421-9

Parker, R. A., & N. G. Berman. (2016). *Planning clinical research*. Cambridge University Press. https://doi.org/10.1017/CBO9781139024716

Pătru, S., Duică, L. C., Georman, V., Bondari, D., Alexandru, D. O., & Pîrlog, M. C. (2021). Coping strategies and global functioning in major depression. *Psihiatru.Ro*, *67*(4), 25–32. https://search.ebscohost.com/login.aspx?direct=true&AuthType=shib&db=a9h&AN=154254086&site=ehost-live&scope=site]

Paulhus, D. L. (2013). Vancouver Index of Acculturation (VIA). *Measurement Instrument Database for the Social Science*. Retrieved from: https://www.midss.ie/content/vancouver-index-acculturation

Prokopiou, E., Cline, T., & De Abreu, G. (2012). "Silent" monologues, "loud" dialogues and the emergence of hibernated I-positions in the negotiation of multivoiced cultural identities. *Culture & Psychology*, 18(4), 494–509 https://doi.org/10.1177/1354067X12456885

Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). *Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment*. Journal of Personality and Social Psychology, 79(1), 49–65. https://doi.org/10.1037/0022-3514.79.1.49

Swagler, M. A., & Jome, L. M. (2005). *The effects of personality and acculturation on the adjustment of North American sojourners in Taiwan.* Journal of Counseling Psychology, 52(4), 527–536.

Saasa, S., & Miller, S. (2021). Biopsychosocial predictors of depression and anxiety symptoms among first-generation Black African immigrants. *Social Work*, 66(4), 329–338. https://doi.org/10.1093/sw/swab038

Sahai-Srivastava, S., & Zheng, L. (2011). Undiagnosed depression and its correlates in a predominantly immigrant Hispanic neurology clinic. *Clinical Neurology and Neurosurgery*, 113(8), 623-5. doi:http://dx.doi.org.ezp.waldenulibrary.org/10.1016/j.clineuro.2011.04.012

Sanchez, K., & Sanchez, E. J. (2020). Environmental and social risk factors in depression. In M. H. Trivedi (Ed.), *Depression.* (pp. 51–61). Oxford University

Press. https://doi.org/10.1093/med/9780190929565.003.0004

Wahab, S., Chun Keat, T., Azmi, A. D., Mahadevan, R., Muhamed Ramli, E. R., & Kian Boon, L. (2021). Risk of depression among MMT patients: Does coping strategies and perceived social support play a role? *Substance Abuse: Research and Treatment*, *15*. https://doi.org/10.1177/11782218211049407

Watson, J. C., & Watson, A. A. (2016). Coping Self-Efficacy and Academic Stress among Hispanic First-Year College Students: The Moderating Role of Emotional Intelligence. *Journal of College Counseling, 19*(3), 218–230.

Watson-Singleton, N. N., Mekawi, Y., Wilkins, K. V., & Jatta, I. F. (2021). Racism's effect on depressive symptoms: Examining perseverative cognition and Black Lives Matter activism as moderators. *Journal of Counseling Psychology*, 68(1), 27–37. https://doi-org.ezp.waldenulibrary.org/10.1037/cou0000436

Wisting, L., Johnson, S. U., Bulik, C. M., Andreassen, O. A., Rø, Ø., & Bang, L. (2021). *Psychometric properties of the Norwegian version of the Patient Health Questionnaire-9 (PHQ-9) in a large female sample of adults with and without eating disorders*. *BMC Psychiatry, 21*, Article 6. https://doi.org/10.1186/s12888-020-03013-0

Zhang, X., & Kong, P. A. (2022). Immigrant Chinese parents in New York Chinatowns: Acculturation gap and psychological adjustment. *Asian American Journal of Psychology, 14(2), 145-154.* https://doi.org/10.1037/aap0000280